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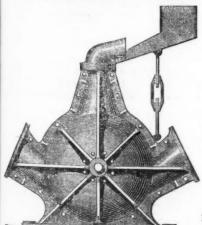
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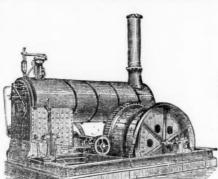
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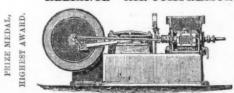
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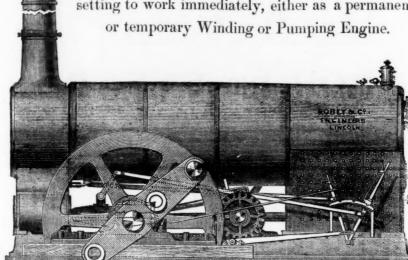
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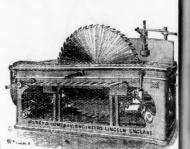


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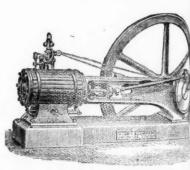


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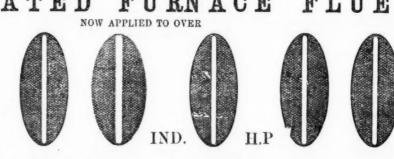
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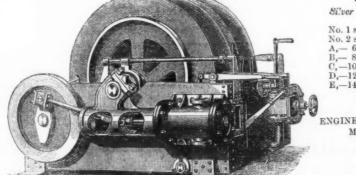
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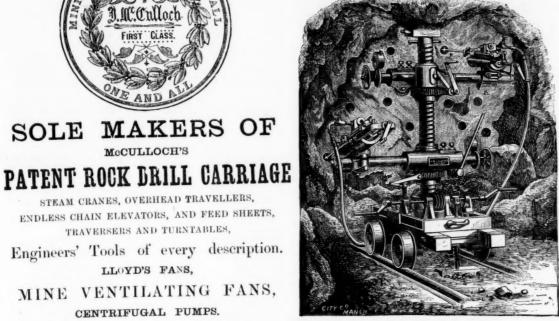
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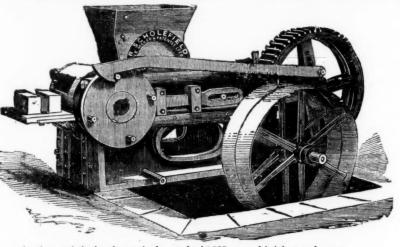
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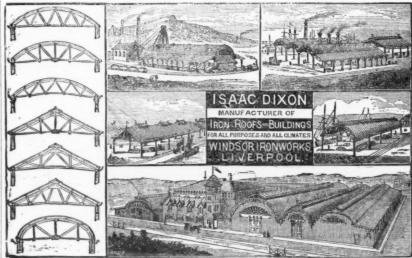
production, and the hands required to make 10,000 pressed bricks per day: -

men digging, each 4s. per day
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Total cost of making 10,000 pressed bricks . SETTING AND BURNING SAME PRICE AS HAND MADE BRICKS.) as it cones from the jit, the cest will be reduced in digging. sed as it can es from the pit, the cest will be reduced in digging. rly adapted for the using up of shale, bind, &c., it will be to the advantage of all Colliery Owners to adopt the usoffi

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Original Correspondence.

GOLD PROSPECTING EXPEDITION TO THE WEST COAST OF AFRICA,-No. I.

By THOMAS CORNISH, Mining Engineer (late of Australia) Author of "Gold Mining, its Results and its Requirements."

The great rush for shares in gold mining companies lately formed London for working mines in India and other countries, has not naturally brought attention to the African Gold Coast, which London for working minies in thuis and other countries, has not maturally brought attention to the African Gold Coast, which mot time immemorial was known as one of the chief gold producgeountries. The Akankoo Gold Coast Mining Company (Limited) as lately formed, with a capital of 150,000/L, to purchase and devepe a concession of a mining property on the River Ankobra, ear the port of Axim, consisting of about 1000 acres, and, as stated at the prospectus, before the final purchase should be concluded at the reports of the value of the property should be verified by ome competent authority. Having myself passed through 25 years reprience of practical gold mining in Australia, and having a dere to see the auriferous resources of other countries, I applied for the position, and was selected as the mining engineer to examine adreport on the property specified, as also the neighbouring gold strict. The general business arrangements of the expedition were mader the superintendence of Commander V. L. Cameron, R.N., C.B., he well known and celebrated African explorer, and Capt. Louis Vyatt, late Commissioner at Axim, whose intimate knowledge of the listrict and habits and requirements of the native tribes on the Coast tyatt, late Commissioner at Axim, whose intimate knowledge of the strict and habits and requirements of the native tribes on the Coast and the interior rendered them specially qualified for such a duty. Thile the special work of prospecting for gold, and reporting on the value of the gold mines and the district generally was placed nitiely in my hands, I selected three practical miners to accompany to assist and superintend the native miners and labourers to do

me to assist and superintend the native miners and labourers to do the clearing and mining work.

Our expedition left Liverpool in the British and African Mail Company's Ompany's steamer Malemba, on Thursday, March 24, and after a somewhat boisterous passage arrived off the island of Madiera on the evening of the 31st, and on April 1 had a visit on shore while the vessel was coaling, and taking in extra poultry and live stock. Having enjoyed our breakfast at Reid's hotel, an institution in the town of Funshall, we had a look around the quaint old-fashioned place. The streets are narrow and hilly, and paved with little pebbles and thin spalls, not by any means pleasant for walking on, and must have taken much time and labour to lay down. The island belongs to the Portuguese, but from its maritime position, its convenience as a port of call, and the salubrity of climate, it is a pity that it does not belong to some Government more liberal and enterprising, so as to better develope the resources and facilities of such a charming spot.

por.
From Madiera to Sierra Leone, having sighted Cape de Verd, we had a very pleasant run of eight days, the weather gradually getting rarmer as we neared the Gold Coast, but not oppressively hot at any me. On Saturday, April 9, dropped anchor at 5 A.M., about a mile ff the lighthouse, outside the town of Sierra Leone, for the purpose king on board Kroomen, or natives of the district, to work the ship ff the lighthouse taking on board Kroomen, or natives of the district, to work the ship and cargo down the Coast and back. It appears to be a regular pastom of traders on the African coast to obtain the services of a number of these Kroomen to work the ships and dicharge and load cargo to and from various ports up and down the Coast, where the traders in palm oil and other West African products do dwell. These Kroomen are good workers, and with fair treatment and good management can be made very fair workmen, and as their numbers are practically speaking unlimited, there will always be a large field for cheap labour to work mines, plantations, factories, and vessels along the West African coast. neap radour to work mines, prantations, ractories, and vessels along the West African coast.

At Sierra Leone we had the first close view of the coast, which is

At Sterra Leone we had the first close view of the coast, which is pronounced by many to be the most unhealthy part of West Africa, and, as stated by some of the officers of the ship, the place is familiarly known as the "White Man's Grave." From the ship sposition of the lighthouse the appearance of the shore, with its cocoa nut trees and densely wooded hills ranged at the back, had not the ap-

pearance of a particularly unhealthy looking spot.

The Guinea, or Gold Coast of Africa, has obtained a most unenviable notoriety for an unhealthy climate, and there appears to be a disposition amongst ships' officers, seamen, travellers, and traders generally to greatly magnify its dangers and discomforts. When this is done with the object of inducing the new comers to exercise all reasonable precaution to guard against dangers from unnecessary exposure to the sun or wet or the realors from summers such advices.

this is done with the object of inducing the new comers to exercise all reasonable precaution to guard against dangers from unnecessary exposure to the sun or wet, or the malaria from swamps, such advice is of great service, but when their ideas of the horrors of the coast climate are reiterated with a persistency of style that savors of bragadocia as to their superior physique in withstanding its evil effect it becomes somewhat monotonous, and is apt to frighten many persons of a nervous disposition from visiting the locality.

After having made arrangements with the Akankoo Gold Mining Company to go to Axim and report on their property, I heard enough in condemnation of the unhealthy nature of the climate and the dangers of the coast to frighten anyone of an ordinary nervous disposition, but having spent many years in Australia, and as one of the pioneers in mining, where difficulties and hardships had often to be encountered, I was not to be deterred from fulfilling my engagement by alarming reports of the dangers to be met with.

As a natural consequence from its position near the equator the leat along the Gold Coast is great, and anyone going there should be careful how they expose themselves to the rays of the sun, also as to the clothing they wear, and their place of sleeping. At Axim, which is situated in about 5° N. lat. and 2½° W. long., the first week of our stay there when the weather was pronounced very hot by the old residents, I found the average to be about 80° to 82° in the shade, and in the sun some days as high as from 110° to 120°, by taking due precaution against the effects of the heat by carrying a umbrella when out in the sun. I did not feel its effects particularly oppressive except when doing a little work or walking, then great prespiration was readily induced, but not much more than was often the case in some parts of Australia during the hot months of the year.

prespiration was readily induced, but not much more than was often the case in some parts of Australia during the hot months of the year. Axim is pleasantly situated on the shore of the bay of that name, with an harbour that can be rendered very safe for discharging and loading of goods; even now, without any artificial protection or facilities, goods can be landed on the beach without difficulty or danger. The town, which on our arrival boasted of only some half dozen white men, including the representatives of two English trading firms, the representatives of two gold mining companies, and the Government Commissioner and doctor living at the fort, a curious looking old structure built by the Portuguese some 300 years since, and which is representative of British protectorate. The fort is guarded by a few native police, one or two of whom are to be found doing duty at the entrance with musket and bayonet, and from the perfunctory manner in which the guard is kept, is quite as much for ornament as use. There is a large native population situate in villages along the coast, the two principal ones being close to north and south of the fort. The representatives of the trading firms at Axim live in comfortable stone houses, and their accommodation was kindly placed at our disposal till a suitable place could be secured for our course of the trading firms at Axim live in comfortable stone houses, and their accommodation was kindly placed at our disposal till a suitable place could be at Axim live in comfortable stone houses, and their accommodation was kindly placed at our disposal till a suitable place could be secured for our own party, which was done by renting a roomy stone house belonging to one of the natives, several of whom have built themselves comfortable stone and mud-wall houses. For the most part the natives live in bamboo huts of a primitive but fairly comfortable character, well thatched with native grasses and leaves. A few main streets are laid out in rectangular form, but between them the huts are built very higledy-piggledy, and considering the large population, how close the huts are packed, and the absence of any regulated sanitary laws, the place is remarkably clean and free from disagreeable affluvia, a constant breeze fresh off the Atlantic Ocean affluvia, a constant breeze fresh off the Atlantic Ocean

disagreeable affluvia, a constant breeze fresh off the Atlantic Ocean has no doubt the effect of keeping the town healthy.

The natives, who appear much similar to others of their race—the Fantees—along this coast, appear to be a happy, contented, and well-fed people. Many of them ready and willing to work, if well paid, bit many of them appear to be so well off, and so easily supplied with their necessaries of life, that a very little work will last them a long time; they like it so well that they would be easily induced to life they along the company of the natives around by down alongside it. The general body of the natives around

Axim are too well off to work very hard; companies and others requiring much labour find it best to bring down Kroomen from Sierra Leone, Grand Cestros, Cape Palmas, and other ports higher up the

It is not to be wondered at that the natives of Axim are, as a rule, disinclined to work hard, their wants are few, and easily supplied. The cocoa nut, the palm, the plantain, and breadfruit trees grow in abundance over their heads, and they have plenty of gold beneath their feet in their streets and houses, and along the beach continuously washed up by the sea. Red and white maize grows in abundance for the planting, which provides a useful and excellent article of diet. Fowls and goats are plentiful, with a few ill-bred pigs and small-sized cattle, and plenty of fish in the bay for the catching. The advocates of women's rights have not, it appears, made any progress in this part of the world, as here they appear to do all the work; the men take life very easily, smoking and lying about, doing nothing at all. Sometimes they will clear a patch of ground for the wives to plant maize in, occasionally go out in their cances to fish, and assist in landing or discharging goods from the few ships that call here, but this is I think somewhat a stretch upon their industry, and is done as much for what an Irishman would call "divarsion" as for profit. The ready money or siller thus easily carned purchases a It is not to be wondered at that the natives of Axim are, as a rule, profit. The ready money or siller thus easily earned purchases a few extra indulgences in tobacco, trade gin, cloths, &c., and helps to break the ennui of their life. The young children are mostly naked, and their elders wear but little in the shape of covering. Some of the chiefs and head men stalk about the town with a listless air, covered with a variegated cloth from their shoulders to their feet, while others of less importance or wealth are proportionately less careful relaced. of less importance or wealth are proportionately less scantily robed. The charms of the maidens are fully displayed without any attempt to hide their (in many cases) well-developed buts, but the appearance of the married and old women are not interesting.

[To be continued in next week's Mining Journal.]

SOME REMARKS ON THE PROFITABLE EXTRACTION OF GOLD FROM SUPERFICIAL DEPOSITS IN WILD TROPICAL COUNTRIES-No. I.

BY G. T. GUNTHER. I shall begin my remarks by trying to point out some of the chief causes on account of which a great many attempts to work such deposits with the capital of civilised nations have turned out to be failures, resulting in losses to the investors in and in disappointment and chagrin to all connected with such concerns. Gold is brought down by natives from the interior in grain or nuggets of various visces coarse dust. See, contained in various vessels such as—ed... posits with the capital of civilised nations have turned out to be failures, resulting in losses to the investors in and in disappointment and chagrin to all connected with such concerns. Gold is brought down by natives from the interior in grain or nuggets of various sizes, coarse dust, &c., contained in various vessels such as—eg., in pieces of bamboo, quills of the feathers of large birds, small skin bags—in short, in various kinds of receptacles, all of which are of a very primitive nature. It is sold to traders, or rather bartered in exchange for ammunition, clothing, hardware, and other articles, and by those traders it is brought to the larger towns, to the rivers or sea-ports, and sold to the merchants. The appearance of gold there naturally arouses attention, and the question is asked—"Where does this gold come from?"—followed up by steps in order to discover the whereabouts of the sources whence it is derived; and if the auriferous locality does not present too great difficulties of access them measures are taken in order to extract the gold in larger quantities, and by means of better arrangements than the primitive crude methods employed by the natives. As a general rule those who are, comparatively speaking, nearest to the spot—that is to say those who live in the country in whose interior the gold has been found—are the first in taking measures for working the deposits on a larger scale; and however much, in most cases their modes of extracting the gold may be technically and scientifically not so perfect as they ought to be, still the cream, the most easily and most cheaply obtainable portions of the deposit, are taken out, and in most cases as far as my experience goes the extracting operations are such as richly deserve being called "rapacious" or "robbery-mining"—German, "Raubban")—a mode of mining which never calculates upon the future, but grasps all it can easily get regardless of all consequences, with the motto, Aprea moi le deluge. In such "raubban" cases, even supposing that after the b adits were driven in the direction of the richest lines, the characteristics of which lines I had given in my report, and in this way the whole hill-side was thoroughly honeycombed, or, as your miners say, the eyes of the mine were picked out. Thus the best had been taken out before the English took over the place. I need not say a word about the immense difficulties we had to encounter, for all your practical readers will know very well what a very difficult task it is to put a recklessly worked mine to rights again. Hence capitalists should make it a rule never to take shares in any foreign mine which has been thus recklessly worked, as in this manner the pernicious germs of one of the causes of failure have already been laid. Even in case that a most thorough and careful re-inspection by competent and inof one of the causes of rather have already been land. Even in case that a most thorough and careful re-inspection by competent and incorruptible men should prove that the concern offers strong promises that by proper management and a more scientific method of working it would still yield good profits, it would still be prudent not to pay at once any purchase money, but if purchase money is at all to be paid and the concern is not taken over on a royalty (which would always be by far the best plan), then arrangements should be made always be by far the best plan), then arrangements should be made that such purchase money is to be paid only after the expiration of a term of several years. The practical operations carried on during that period would then afford the most reliable evidence as to the real value of the concern, and if it is a bona fide property the vendors would, of course, reap this merited benefit therefrom. In this way any unsound mala fide, or, plainly speaking, swindling transactions would be altogether impossible, a very great deal of capital would be altogether impossible, a very great deal of capital would be altogether impossible, a very great deal of capital would be altogether when we have many way that is to say into the would be altogether impossible, a very great deal of capital would be prevented from going the wrong way, that is to say into the pockets of unscrupulous vendors and promoters, but it would go to swell the capital available for sound concerns. Legitimate mining would thereby greatly gain, and the impossibility of the growth of unsound, of mushroom, concerns would prove to the public that mining enterprise is one of the most profitable branches of industry that exist. There are other circumstances we frequently come excess that exist. There are other circumstances we frequently come acros which likewise contribute their contingents towards the causes of failure. The head quarters, the board of directors generally in by far most cases unavoidably reside at a considerable distance from

is not always the case. is not always the case. I do not mean to say that that disharmony meant antagonism of a general nature, but what I mean to say is that directors often take measures and act in a way of their own without duly weighing and considering the mature, special features, and other surrounding circumstances connected with the deposits which are to be worked.

I have not sufficient statistical material at my disposal in order to give in correct fluxes the award recoverying in which streams the award recoverying in which streams the award recoverying in which streams the same transfer of the correct fluxes the award recoverying in which streams the same transfer of the same transfer of the correct fluxes the award recoverying in which streams the same transfer of the correct fluxes the award recoverying in which streams the correct fluxes the award recoverying in the correct fluxes the correct fluxes the correct fluxes the correct fluxes the award recoverying in the correct fluxes. I do not mean to say that that disharmony

give in correct figures the exact proportion in which superficial gold-bearing deposits stand to such as are lasting and workworthy (German, abbanwurdig) in depth, hence I must rely in this respect (German, abbanwürdig) in depth, hence I must rely in this respect only on my own personal experience, and according to that I should say that out of about 50 auriferous deposits 49 x2c of a superficial nature. This fact, however, is generally not taken sufficiently into account, for on looking at the prospectus of any out of many gold mining companies you will very frequently find that allusion is made to Morro Velho (St. John del Rey) or other gold mines that have been thoroughly proved as workworthy in depth. Thus it happens that in by far the most cases shareholders are made unduly sangvine, and directors are influenced in their organisatory measures more by what they wish and hope the deposits should be and not by what they are in reality. Thus they are led to organise a staff and administrative machinery that are far more costly and unwieldly and far more in excess of the actual requirements than the nature of the deposits and their surrounding circumstances justify. Plant is bought at or near the head quarters of dimensions and at a cost far beyond the necessities of the case, and is sent out long before the extent of the actual workworthiness has been fairly ascertained. Such things the necessities of the case, and is sent out long before the extent of the actual workworthiness has been fairly ascertained. Such things are done, I admit, often inadvertently, but I am afraid that frequently such proceedings are dictated by considerations of a speculative nature, in as much as the creation of a big staff and the buying of large and expensive plant—duly announced, of course, to the public—tend to spread throughout the land the impression that the concern in the launching of which such great preparations are made must be a very good one; and capitalists who are not sufficiently experienced in such matters are induced to invest their money in such undertakings, paying possibly a premium, while the wire pullers at head quarters make profits by share transactions quite independent of the yield of the mine, which, after they have filled their pockets out of other people's purses, may for all they care go to the devil. Cases also occur in the buying of plant, &c., where the largest and most expensive sets of plant are bought, not on account of being required at the mine, but because certain individuals connected with the company at head quarters—what with extras, comof being required at the mine, but because certain individuals connected with the company at head quarters—what with extras, commission, fees, and other arrangements of, of course, a strictly private character, secure to themselves also considerable gains. It is to be hoped that this mining in other people's—to wit, the shareholder's—pockets will be gradually weeded out, but it is well known that it still exists to this day. Let us now consider the influence whielt such proceedings at head quarters have upon the actual operations at the mine. The people there, what with clearing heavy hard wood forests, with trees of extraordinary size, forming plantations so as to be able to grow the most necessary articles of food on the spot, building houses, and laying out the preliminary works necessary for regular mining, besides carrying out exploring works in all directions, making trenches here, pits there in the surrounding wilderness, have indeed, all hands, besides their brains, full of very hard work. The manager does his best to get out gold by streaming, flushing, &c., so carried on as not only not to interfere with future operations, but rather to contribute towards facilitating operations on a large scale; rather to contribute towards facilitating operations on a large scale; even the smallest work of the former class being so planned that it forms part and parcel, a link as it were, of the whole. Your experienced readers will know this laying out of the works is by no means an easy task, but one which requires a great deal of careful research and study. He (the manager) has perhaps written that crushing machinery (stamps) will be advantageous in the course of time. He is informed in return that, in order to save time and labour, a complete set of stamps and other plant has been bought and is to be sent out at once, and he would have nothing else to do but to see that the energial (ison) plant he heaven't up to the great where the operabe sent out at once, and he would have nothing else to do but to see that the said (iron) plant be brought up to the spot where the operations are going on. Of course people at head quarters mean well, and intend thus to lighten the manager's burden. Such, however, is by no means the case; on the contrary the necessity of clearing long tracts of forest in the direction of the line of road and the construction of the same, involving the necessity of building bridges, justifies laying down sometimes fashine layers, with wood work across swampy portions, clearing of rivers, &c., absorb an awful amount of time and labour, the which could be far more profitably employed in further exploring the deposit and its neighbourhood, so as to be able to form an estimate as to its yield of a still greater reliability than could have been obtained even by the most careful inliability than could have been obtained even by the most careful in-

as to be able to form an estimate as to its yield of a still greater reliability than could have been obtained even by the most careful inspection and re-inspection.

In tropical forest tracts timber, mostly of the hardest and most valuable kinds, forms a collateral product, resulting from the unavoidable clearings which must be made for plantation, building, and mining purposes, hence the cost of cutting it cannot be at all taken account of, so that the only cost would be merely that of its short distance for local transport. Only the metal parts, such as stamp heads and other requisite metallic parts of the plant, would have to be sent from abroad, and they could easily and cheaply be brought on mules or pack oxen, for which purpose bridle paths would be cut through the forest at a comparatively trifling cost. In this way the necessary plant would be made on the spot, and in a way far more adapted to the requirements of the mine than would be the case with plant sent out. Of course, all the proceedings above alluded to would combine to eat up part, possibly even the greater part, of the working capital, so that often the latter is almost exhausted before the deposit has been fairly and extensively tested, and in consequence the concern suffers from bad lungs already at the very beginning, whereas with a modest staff at first, and only the most necessary portion of plant (a great portion of which could, as already said, be made on the spot)—in short, with a small beginning, the dimensions of which would increase in proportion as the yield increases, things might be made tog on comfortably, and under a foresight, full, able, and economical management, the concern would grow gradually bigger and more profitable, so that when the time come, when the superficial deposit is getting exhausted, and has to be given up, only profits have been made instead of losses incurred.

Lossnitz*, Erzgebirge*, Suxony*, July* 25.

MINING IN NEW SOUTH WALES.

SIR,—As attention is now being drawn to our gold mines, I forward you the enclosed extract, which goes to prove, geologically, the permanent nature of our auriferous deposits as also their vast extent, and may, therefore, be of interest to intending investors. I see by the home papers that India has got the start of us in securing capital to work her mines, and I also see by some of the reports from them that at least some of the managers have evidently very little practical hardeless of sale variety and they are the processors. that at least some of the managers have evidently very little practical knowledge of gold mining, whether reefing or alluvial, and it would be well for the interests of what may and probably will be a large and permanent industry, that a few good practical miners from here should be engaged to assist in opening up these old workings, as without an intimate knowledge of this special class of mining from first to last, not thousands, but tens of thousands, will probably be thrown away before success is finally achieved.

I specially noted that one industrious (too industrious?) superintendent had managed to crush about 1800 tons stone with a 20 head battery in three weeks, whereas if the quartz was the ordinary kind, 500 tons was the most that justice could be done to. "More haste more waste" is a digger's proverb, and when his stone is being put through the mill he looks very sharp at the tailings if more than about 80 tons per week for the usual 10 head battery is being averaged, I also noticed that another mine had crushed 26 ozs. to the ton? quite possible of course, but so unusual that without seeing the reef I feel all but sure that it was not from the general body of stone but

I feel all but sure that it was not from the general body of stone but from a thin vein or isolated shoot, so that probably it took 100 tons of the average reef to produce 10 tons or 12 tons of such stone, and then it is a really splendid property. An 18 in. or 2 ft. reef giving steadily 1 oz. to the ton is an excellent investment, and by no means a bad one if only \(\frac{1}{2} \) oz. (if the country is fairly work blo), whilst if it \(\frac{1}{2} \) ft. and goes northing like 14 oz \(\frac{1}{2} \) oz it is a fortune to all Is 3 ft, and goes anything like 13 oz, to 2 ozs, it is a fortune to all

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concerned. As far as the reports from India go at present, the prospects there are not to be compared with our own here, but all the same now that so much money is being sunk in her mines it will be a thousand pities if success is missed for want of the intimate special knowledge, not only in the raising and crushing, but also in the saving of the gold afterwards which only long experience in various forms can possibly give.

Since the raise gave water for washing up and puddling at Temora.

can possibly give.

Since the rains gave water for washing-up and puddling at Temors (in this colony) the yields have been extraordinary, and it bids fair to be one of the richest fields yet found here, many of the best allu-vial claims and nearly all the richer reefs are in the freehold of a Mr. Deutscher, who two or three years since was a hardworking free selector, and now bids fair to be a millionaire in a modest way. Such are the chances in a gold field.

Gymp, e, or Queensland, is also turning out splendid yields from her reefs, and 100,000l. was refused yesterday for the Pheenix claim, aithough it could have been bought for a few hundreds within the last 12 months. Telegram just in that heavy gold, more gold than stone, just struck in Hall's lease which laid idle for many years and has only just begun work again. Sydney, June 1881.

GEOLOGICAL SKETCH MAP OF NEW SOUTH WALES. - We have received from the Hon. E. A. Baker, Minister for Mines, a copy of the Geological Sketch Map of New South Wales, now issued for the first time. This map has been compiled from the original maps of the late Rev. W. B. Clarke, M.A., F.R.S., F.G.S. It brings before us some of the results of the extensive researches, and indefatigable zeal of that distinguished scientific man, who for nearly 50 years laboured to promote the welfare of this colony. The principal geological formations are indicated by different solours, and thus the areas occupied by each formation are at once apparent. On looking at the map one is struck with the fact that almost the whole of the eastern portion of the colony within a distance of about 200 miles from the coast, with the exception of the areas of the Hawkesbury. Wisanamatta, and Clarence river series, and some Tertiary and Igneous rocks, is composed of the Palecozic, or oldest formations; which, therefore, constitute that tract of clevated country known as the great dividing range. This remarkable absence of the marine formations later date would seem to lend strength to the theory that the higher parts of the dividing range have not been submerged beneath the occan since the Carboniferous period, and that this portion of Australia must be of great geological age, which may account for some of the aucient forms of plants and animals still living upon this continent. The Carboniferous rocks are seen to extend right across the dividing range; so that during their deposition the high granite and Silorian ranges of New England, and those of the southern districts, where Mount Kosicusco forms the aumnit, must have been separated by the sea or lakes. A belt of Palæozoic rocks appears, from the patches of them scattered about the area marked "not geologically examined," to extend across the centre of the colony to the porth-west partion, where the Mount Poole gold field has recently been discovered. On the north side of this bett lie the great Tertiary plains of the Upper Darling river basin received from the Hon. E. A. Baker, Minister for Mines, a copy of the Geological Sketch Map of New South Wales, now issued for the

OLATHE SILVER MINING COMPANY.

SIR, -In last week's Journal I see the purchase of the mine has been completed, and that Messrs. Ashton, Barry, and Carter testify to the wonderful richness of the ground in the "immediate vicinity." A letter also appeared in the same Journal, signed "S. B.," containing extracts from the Leadville and New York papers, where the mine is said not to be on Fryer Hill, as described in the prospectus. Now, as I have taken shares in the company, and paid 5s, per share, and another call of 7s. 6d. per share is about due, I should like to have the opinion of some other shareholder as to what should be done. If the New York Financial and Mining News should be correct the shareholders will have their remedy.

INVESTMENT.

EUREKA (NEVADA) MINING DISTRICT.

SIR,-I have the pleasure to hand you my usual budget of news from this locality:—
The price of silver has been advanced to \$1.13% c. per ounce at the Sanden

The Richmond Company are receiving immense quantities of wood for winter

us. The Richmond furnaces are about ready to resume operations. Two of them were fired up yesterday, to undergo the process of drying out. The repairs to the third are not yet completed. The engine will be in order by Monday or Tuesday, and it is quite likely that smelting will be resumed before the last of the present week. It is good for the town and district for the Richmond to be in full blad.

Tueslay, and it is quite likely that smelting will be resumed before the last of the present week. It is good for the town and district for the Richmond to be in full blast.

R. Rickard and family returned last evening from Sun Francisco.
Forty miners are employed in the Bullwhacker Mine, the property of the Ruby and Dunderberg. Everything runs nicely about the Ruby and Dunderberg Works, and they are making lots of bullion.

A large number of men are being engaged for work on the Eureka and Colorado Railroad. The Eureka and Colorado Railroad surveying party are making prepractions to take the field to morniow morning for active service.

The Eureka Consolidated new shaft will not be completed in eight or nine months yet. Developments are to be looked for at any time. The Eureka Consolidated's new shaft has attained a depth of \$36 feet. The new brick assay office at the Eureka Consolidated Works is finished, and fitted up in fine style.

The Connolly holsting works will start up in a day or two. Joe Caruthers yesterday sent in some \$200 ore from Taylor District in White Pine County. It will be reduced at the Eureka Consolidated Works.

Superintendent Levy will make a shipment of ore from the Bowman next week. The mine is steadily improving.

Work has been temporarily suspended on the Mountain Boy Mine.

A gentleman, who speaks positively, claims that there are more marriageable your 21-ties in Eureka now than ever before in her history, yet the lords of

at Secret Canyon.

A gentleman, who speaks positively, claims that there are more marriageable yo in I tiles in Eureka now than ever before in her history, yet the lords of crettion don't seem to favour a matrimonial boom. Old Brig, used to say to his orthod x flock—"See here, you young rascals, if you don't marry these blooming girls before the snow falls I'll see that the price of blankets is elevated 500 per cent."

London, Aug. 3.

NOUVEAU MONDE GOLD MINING COMPANY.

The letter of your correspondent, "Vigil," respecting the sig. The letter of your correspondent, "Vigit, respecting fine market influence of Mr. Lambert's report, reminds me of a similar influence a downward one—which followed a very similar report, dred June 17, 1880, and which I have now before me. This report of last year wound up with a proposal to receive 80,0007, in order to provide for the purchase money of the Nacupai property, and for working capital. The subscription list was open for only two days, and was a believe an absolute failure. Subscription between the lower of the Nacupair property and the subscription is the subscription in the subscription is the subscription in the subscription in the subscription is the subscription in the subscription is the subscription in the subscription is the subscription in the subscription in the subscription is the subscription in the subscription in the subscription is the subscription in the subscription is the subscription in the subscription in the subscription is the subscription in the subscription in the subscription is the subscription in the subscription in the subscription is the subscription in the subscription in the subscription is the subscription in the subscription in the subscription is the subscription in the subscription in the subscription is the subscription in the subscription in the subscription is the subscription in the subscription in the subscription is the subscription in the subscription in the subscription in the subscription is the subscription in the subscription in the subscription in the subscription in the subscription is the subscription in the subscription in the subscription in the subscription in the subscription is the subscription in the subscr and was, I believe, an absolute failure. Subsequently, however, part of this sum was privately advanced. In the meanwhile the price of the shares dropped to 3, 4. Possibly dealers have this circumstance the shares dropped to §, §. Possibly dealers have this circumstance in their recollection, and are awaiting the sequel to the glowing report—proposed issue of more shares.

Chisrick, Aug. 2.

MARBELLA IRON ORE.

Sir.—I notice in the Journal of July 30 a note signed "Iron and Coal," and expressing disappointment with the report just published. I fail to see how anyone can look upon it as unfavourable. "Iron and Coal" says the profit for the half-year is 5400L, now, I should say the profit is 7077L. 11s. 8d.; and there also ought to be added

say the profit is 70.77. Its. 8d.; and there also ought to be added 1859l. 9s. Ild. paid out of revenue for railway repairs -8917l. Is. 7d.—this is the gross profit carned. The old contracts are now finished, which will allow a much larger margin for profit, the output from the mines daily increasing, that, I am as sure now as ever, a good dividend will be declared. "Iron and Coal" says something about the short time the lease of the mine has to run; in this he shows that he knows nothing about the mines, or else he would know that the directors have heave successful in arranging a long lease of

Herald (the leading commercial newspaper in Scotland), which, I think, will show the opinion of Marbella shares: "The only feature in Metals and Minerals was the dealing in Marbella, and that was due to the issue of the report (which we give in another column). due to the issue of the report (which we give in another column). Its value is variously weighed; it is disappointing to those who expected the declaration of a dividend, but otherwise it appears to ome quite up to all reasonable anticipations.

A SCOTCH MINING ENGINEER.

THE CEDAR CREEK GOLD MINES AND WATER COMPANY

SIR,—I must congratulate the shareholders in this company on the prospect of the mining property in California, known as the Cedar Creek Mines, being shortly reworked under good management, and with a fair amount of capital to ensure its proper development. The company ceased working the mine about two years ago, when there was a great depression in most undertakings of this kind, and when there was a difficulty in raising fresh capital. I understand the shareholders are to have the chance of reaping the benefit of the many thousands of pounds already spent in opening up the mines, and as only a matter of 10,000?, would be needed to complete the working as only a matter of 10,000. Would be needed to complete the working there and place the Cedar Creek in the dividend-paying list, there is not likely to be any difficulty in getting this sum subscribed. The other day we saw the shares in the Birdseye Creek Company run up from 12s. 6d. to 2l., and I predict a similar rise in Cedar Creeks before many months are over.

THE HUNGARIAN COPPER COMPANY.

SIR,-Mr. Higgins deserves thanks and help from all bona fide investors for the revelations he makes in last week's Journal about the Hungarian Copper Company, and I beg to tender mine to him. His information is the more valuable to me as I recognise amongst the names he mentions more than one connected with another mine in which I have the misfortune to be a shareholder, and which has turned out an equally unfortunate business for shareholders who are not on the promotion or management list. My case is even a worse one than Mr. Higgins's, for not only have my shares fallen from a high price to nothing, but on my writing to complain of the magement, and stating my intention of bringing the matter before public, I received the most insulting threatening letters in reply. do not, however, intend to allow myself to be deterred by any I do not, amount of threats, and in a week or two I hope to publish a sample of these letters, signed at full length by the gentleman who wrote them to me. I have delayed doing so earlier pending the final collapse of the company in question and the obtaining of some little details relating to the promotion of the mine, which I hope soon to be in a position to make public, with names, dates, and figures.

HUNGARIAN COPPER COMPANY.

SIR,—Referring to my previous communications herein, I regret to have to inform you that bad as the affair might seem to be therefrom, "yet worse remains behind." From investigations I am purroom, "yet worse remains behind." From investigations I am pursuing, I can at once point to a very serious feature against the possible well-being of this concern so long as it continues—I mean litigation. Details of this shall be furnished on the completion of my task. I had hoped this week to have visited the property, and to have made enquiries in the neighbourhood as to perty, and to have made enquiries in the neighbourhood as to the genuineness of the affair; but, failing this, I have asked for information from residents there, which I hope duly to send you for publication. The property, doubtless, is a valuable one, and the success in working is entirely dependent on the bona fides of those who should have the welfare of the shareholders at heart, and not solely their own aggrandisement. If any fellow-shareholder should read this I shall feel obliged in receiving any information as to the property, and to co-operate with him, or them, in the manner best suited to conduce to the interest of all concerned herein.

Holloway, Aug. 4.

H. W. Higgins.

THE CHANNEL TUNNEL-VENTILATION.

SIR,-In the Mining Journal of last week you gave an estimate of the underground passages in English mines, with a view to showing that the Channel Tunnel of 22 miles in length would be infinitely smaller than these, and hence it may be inferred that there would be no difficulty in making that tunnel, or in working it when it was made. These, however, have not much to do with the tunnel in question. The points upon which it seems to me the tunnel depends made. These, however, have not much to do wint the tunnel magnetion. The points upon which it seems to me the tunnel depends are—1, the construction of the tunnel; 2, the temperature of the strata; and, 3, the ventilation. With regard to the construction of the tunnel it is a simple piece of drifting, and whether done by machinery or by hand-labour is simply a work of time and money. The depth from the surface will be so small that the pressure of the superincumbent strata will not be at all injurious, as was the case both in the Mont Cenis and St. Gothard Tunnels. With regard to the underground temperature if we suppose the depth of water to be 180 ft, and the depth under the water to be 50 ft., the temperature will not be appreciably higher than that at the surface, so that there will not be any difficulty under this head.

With regard to the ventilation, this is the only point in which there is any difficulty. In coal mines a speed of 5 ft. a second would be considered necessary in a mine a mile long, but this is probably more than is needed. I notice in the Times of July 20 an abstract of a report by Signor Frescot on the ventilation of the Mont Cenis Tunnel, from which it appears that the velocity of the air current is about 5 ft. per second. This velocity requires to be maintained during the summer season by means of a fun placed at the end of the tunnel, and the amount of ventilation is barely sufficient for the passage of 12 trains per day. Assuming the same speed of air and the same number of trains (and there never can be fewery) it follows that the

of 12 trains per day. Assuming the same speed of air and the same number of trains (and there never can be fewer) it follows that the Channel Tunnel, being two and three-quarter times the length, the speed of the air will require to be two and three-quarter times 5 ft., or 133 ft. per second. Now, if we take the usual calculation for a tunnel 22 miles long the water-gauge required will be 41 ft., and every square foot of the sectional area of the tunnel would require 7-horse power to ventilate it. So that if the tunnel had an area of 430 square ft., the horse-power required would be over 3000. Of course Signor Frescot states that out of 6987 metres of carbonic acid produced 6939 are produced by the locomotives, and this leads us to considering the propriety of having some other mode of drawing the trains than locomotives. Compressed air-engines might be adopted, or stationary engines fixed at both ends, or an electric railway might made. Any of these would greatly do away with the difficulty ventilating the tunnel.

In order to attain these objects best probably a pair of drifts from each side, 11 ft. apart, 7 ft. square, and each rising towards the centre at the rate of 18 in. in the mile, would be most suitable. One of each pair would be the return for the other, and thus the smoke could all be sent out that road which the mon did not require.

ROBT. THOS. MOORE, B.Sc., C.E. Rutherglen, 10g. 2.

UNITED SHEPHERDS WHEAL ROSE.

about the short time the lease of the mine has to run; in this he shows that he knows nothing about the mines, or else he would know that the directors have been successful in arranging a long lease of mines that will be worked even more profitably than that previously worked. The recent fall of the shares was owing to no interim at villend being declared, which caused those who bought, expecting an interiment, it is not the course the directors have at this time taken, and I am as certain that the share of this company will before long stand at doubt to be worked by an influential party, guided by men who are the present price. I have bought mine in, and would strongly advise the present price. I have bought mine in, and would strongly advise the present price. I have bought mine in, and would strongly advise the present price. I have bought mine in, and would strongly advise the prospects are all that can be desired. The latter is about to be worked by an influential party, guided by men who are to receive the directors have at this time taken, and I am as certain that the share of this company will before long stand at doubt to the worked by an influential party, guided by men who are to receive the directors have at this time taken, and I am as certain that the share of this company will before long stand at doubt to be worked by an influential party, guided by men who are to receive the directors have at this time taken, and I cannot see why United Shepherds about to be worked to be a good mine. So far as situation is concerned, and with a view of developing the mines in a miner-like manner, I would suggest that a competent man be engaged as a munger, when, o

nagement I trust these calion."—Truro, Aug. 3. PRACTICAL.

LIMITED LIABILITY, AND THE COST-BOOK SYSTEM

LIMITED LIABILITY, AND THE COST-BOOK SYSTEM.

SIR,—I have from time to time read the correspondence in the Journal on the comparative merits of the Cost-book System and Limited Liability, and have felt much surprise at the ignorance of the subject which the writers have shown, particularly the advocates of the former. I would not, however, have troubled you on the matter, but for the glaring suppression of facts by the writer in Messre. Watson Brethers Mining Circular in last week's Journal. He says that if share are fully paid up it is Limited Liability "proper," and if shares are fully paid up the holders are liable for the remainder, and this he calls Limited Liability "improper." Here he strangely give an erroneous interpretation to the word "limited." Where share are fully paid up there can be no liability, and they might be called (as they are in Australia) no liability shares. When the amount of each share has been only partially cleared up the remainder is each share has been only partially cleared up the remainder.

are fully paid up there can be no liability, and they might be called (as they are in Australia) no liability shares. When the amount of each share has been only partially cleared up the remainder is what the holder may have to 1 ay if required, and represents the "limit" beyond which he is under no circumstances liable.

Now, what is the case with regard to Cost-book shares? The holder of these is liable ad infinitum not only for his own proportion of the costs, to which there may be (and too often is) no end in fact is called upon to pay in the aggregate a much larger sum than be ever contemplated to lay out on any particular adventure, but he is also liable (and this the advocates of the Cost-book System who write in your Journal carefully conceal) for the proportions of these also liable (and this the advocates of the Cost-book System who write in your Journal carefully conceal) for the proportions of the who cannot pay, and, indeed, can be sued for the whole debts of the concern, and yet is entitled to only his original share of any benefit. More than that, he is liable to contribute to the assets of the company if the mine is stopped or an order is made to wind-up within two years after he has ceased to be a shareholder. He may have paid 50% per share; he is still liable for 500% or 5000% as the case may be, and not a few such instances have happened. The writering your last number is, therefore, wrong in saving that a specialistic strength of the control of the case of the case may be and not a few such instances have happened. your last number is, therefore, wrong in saying that a sharehold can relinquish at any time, "and free himself from all furth

This power to relinquish is also unfair and a serious injury to This power to relinquish is also unfair and a serious injury to the original subscriber, who is thus subject to heavier calls for carrying on the mine, when it is generally some of the most substantial patners, who have the best knowledge of the prospects, who take advantage of the privilege, thus weakening the company, and leaving fewer good shareholders to bear the brunt of future risks. It is verified to say "if properly conducted" the Cost-book System is a good one, but how is that to be ensured for the protection of the shareholders generally and individually? Under Limited Liabi" ver each subscriber is liable for the amount he originally underton. I find if necessary, and under no circumstances can be made to pay more if necessary, and under no circumstances can be made to pay m

A person fixes the sum he is willing to contribute towards a ticular undertaking, and whether it has been conducted proper improperly he cannot be asked for more. I have reason to be that persons are being misled by the erroneous statement and it is, therefore, important that the real facts should known.—Aug. 4. G. W. RITCHIE

"THE LIMESTONE OF COUNTY ANTRIM."

" BY AN IRISH MINER."

SIR,—An article with the above title appeared in the Supplement to the Journal of July 9, and on which, being a constant reader the Journal and also an Irish miner, I would ask you to allow space to make a few remarks. I may inform you that I am a believ generally in the theories of Jukes and Geikie in all they say regar ing the deposition of the limestone of County Antrim, and its s incumbent basalt, as well as in the hitherto accepted theory regaing the age of the latter. And, with reference to this, the key "the simple theory" advanced by "An Irish Miner" to my min seems to rest on his assertion that the basalt is pre-cretaceous, an not post-cretaceous, as is generally believed; in other words, the basalt was erupted before the limestone was deposited, and m afterwards.

Well, it may seem a piece of assurance on my part to doubt the with the writer in a previous paragraph tells of is no theory that is being advanced, but every assertion madefunction fraction to the practical stubborn facts, and from close and careful observation Yet, Sir, with a considerable experience, and, after some close and careful observation, I find a great many facts going straight in the teeth of many of the assertions of "An Irish Miner." If the basis as he says in his first conclusion, "must have existed as an upheav previous to the deposition of the cretaceous system, and possibly the contract of the cretaceous system, and possibly the cretaceous system. the lias," how comes it that we find in a hundred places in the count veins or dykes of basalt (many of them undoubtedly of miocene age from a few inches to many feet in width, that have been forced erupted through the beds of limestone, and exercising such mel-morphic influence on the limestone itself as to change it from the nature of chalk to that of a coarse species of marble? That this a fact is beyond dispute, and the instances are so numerous that ineed not particularise them. And that the basalt overlies the limestone is equally a fact; for, at some of the quarries named by "ha trish Miner," especially at Belfast, Whitehead, and Magheramona thousands of tons of basalt have been stripped off the limestone, and sold as road metal and building-stone. But, perhaps, one of the best examples afforded in the county that the limestone exists to a very considerable extent under the headt can be seen at Garren Paint. considerable extent under the basalt can be seen at Garren Point one of the many bold headlands on our coast. There, an area many thousand square yards composed of limestone, capped by basal has slipped away from its original site, and has subsided so far doubt by the action of the sea on the underlying soft strata of greensand, lias, and red marls) as to expose behind the fracture limestone in situ, but with a much increased cap or cover of basal

limestone in situ, but with a much increased cap or cover of basaliMr. Editor, it appears to me that it was not necessary for "An
Irish Miner" to invent a theory to account for any phase of the occurrence of the limestone of County Antrim, especially seeing that
in doing so not only had Jukes and Geikie to be knocked to the wall,
but also Sir Isaac Newton and the laws of gravity.

In the first sketch he annexes he shows the limestone abutting
against the basalt (to use his own words) "like the truncated apas
of a cone;" but, unfortunately for his theory, the apex of the cust
described gets so far under the superincumbent basalt that when we
keep in view the terms of his second conclusion—" that the general

keep in view the terms of his second conclusion-" that the gen ontour of our basaltic hills, irrespective, of course, of past or evels must have existed previous to the formation of the cre system," we are forced to ask him, how was the basalt supported such a critical position as shown in his sketch before and during deposition of the cretaceous system? Why did the weight of basalt, which he now tells us "has actually jerked or pressed Why did the weight of the could all be sent out that road which the men did not require to travel in. The holings could be made between these mines every 200 yards, and the air carried in this distance by bratticing. If this were done I see no difficulty whatever in making the tunnel in a reasonable time, even with manual labour. If it were desired to make two separate tunnels the width could be taken off one side of each of the drifts, leaving the I4 ft. pillar intact, or if one large tunnel were wanted the pillar could be taken out, and the space would be sufficient for a double line of rails.

Rutheralen, 164, 2.

Robert, Thos. Moore, B.Sc., C.E.

siderable extent under the basalt all experience shows. of occurrence of the latter—for that it does exist to some very considerable extent under the basalt all experience shows.

I believe with Jukes and Geikie that the limestone existed as a support of the constant of the same of the constant of the constan

comparatively level deposit before the overflow of basalt took place. I believe that when this eruption or succession of eruptions took place, and when the limestone was overflowed with such enormous place, and when the limestone was overflowed with such enormous places. bodies of molten matter, it naturally would suffer a diminu thickness from two causes—first, from partial destruction by the escape of carbonic acid gas; and, second, from compression by the super-imposed weight.

Both of these forces named would naturally be exerted most in

tensely towards the centres of disturbance, decreasing in intensity outwards. The loss of thickness in the limestone, which is least a the fringes of the cap or cover, and increases in thickness inwards would be replaced by basalt, and, so far as my experience goes, find that to be the case. From the cause just named, and from the fast AL. M.

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most in-intensity s least at inwards, oes, I find the fact

that the basaltic cap or cover is so steep, in any case where the limestone workings have been pushed forward into the hills it takes on
so heavy a cover as to make working increasedly expensive and difficult, and in some cases faces have been abandoned altogether; but
that limestone in bed is really totally cut out is contrary to the
facts, unless in some unimportant and exceptional cases, when in
facts are case a clearly defined downthrow fault satisfactory
secounts for it.

Also the call made
at the last meeting was more than double what the mine actually
lost, and, therefore, I consider Mr. Hocking's remarks very unjust,
and not very straightforward in their weak endeavour to depreciate
my past services.

Mr. Hocking also talks of my not being open and straightforward. I
have no hesitation in saying that the more open and public this matter ounts for it.

accounts for it.

In some parts of the county the limestone has been so distributed (no doubt by the eruption of the basalt) as to be folded over on its edge. In cases where this occurs the limestone is naturally almost at once cut out by the basalt; but, fortunately, this mode of occur-

at once cut out by the basalt; but, fortunately, this mode of occurrence is rare.

"An Irish Miner" further states that "throughout the interior of the country no limestone occurs, although there are numerous valleys and ravines which could show the crop out if limestone really existed, which it does not." Here again I must differ with him; for, so far as my observation and experience go, at any point in the interior of the country or in any valley or ravine which exposes the horizon on which the limestone should occur there will it surely be found. It can be found and does exist in the vicinity of Magherafelt and Moneymore, near the top of Shevigullon Mountain, and I believe also near Rasharkin—all places in the interior of the country.

If the theory of "An Irish Miner" had been in accordance with the facts, and had been favoured by the weight of evidence, I should have gladly joined in according him that credit to which he would have been entitled as a more acute observer than his fellows; but the contrary is, to my mind, so near the truth that I do not consider I do him any injustice when I say that in all he has written that of it which is true is not new, and that of it which is new is not true. I thank you, Mr. Editor, in anticipation for allowing me so much space in your valuable Journal.

County Antrim, July 27.

EAST CRAVEN MOOR.

EAST CRAVEN MOOR.

SIR,—Some months ago a dividend of 5s. per share was declared on the shares in the East Craven Moor Mines, but it has not been paid yet, at least I have not received it. I wrote to the secretary, but having not been favoured with a reply perhaps some of your readers would kindly inform me whether the dividend has been paid and if not why not NEMO.

NORTH CORNWALL.

NORTH CORNWALL.

SIB,—I have read many communications in the Journal alluding to the mineral wealth for silver-lead within a zone specified, more particularly by your well-known correspondent, Mr. R. Symons. I have to-day visited explorations being made on the Trezeres property, at Padstow, and can testify to the truth of those remarks. Two shafts have been sunk on the sett, and the mass of rich burnt cindery gossan is remarkable; and, although at a depth of 6 fms. only, two champion lodes have been cut from 6 to 8 ft. in width, carrying rich silver-lead and grey and yellow copper. The lodes can be followed over an immense tract of country, especially on Duchy land at St. Miniver. It is, indeed, surprising that such riches have not been tested before. Padstow, Aug. 3.

WHEAL ELIZABETH.

WHEAL ELIZABETH.

WHEAL ELIZABETH.

SIR,—We learn that operations on a spirited scale are to be commenced in this celebrated old mine, which, like its sister Hewas, has contributed its quota in the yield, it is said, of over 20,000% worth of tin ore. The property has been inspected by several mining engineers of repute, all of whom are unanimous in their opinion as to the great value of Elizabeth. The lodes at the 60 and 70 fm. levels are very rich, equalling, it is stated, the richest mines in the county. We need not enter into details as to the geological condition of the mine; it having the same lodes and lying immediately to the west of Great Hewas must speak for itself, and which will be fully understood when we state that Great Hewas when in its prosperity sold 80 tons of tin per month—indeed, so rich were the lodes that the Messrs. Lyle erected smelting houses on the mine to refine their tin, which has not been done in any other tin mine in Cornwall. From private information we have received within the last few days we do not hesitate in expressing our opinion that the Wheal Elizabeth Company possess a mine equal to none in the county of Cornwall, and we should advise the shareholders not to be led away by any adverse statements which may arise from interested parties. Should they desire any information as to the value and character of their property they should write their manager, whose capabilities are well known in Cornwall.

A RESIDENT IN THE NEIGHBOURHOOD.

St. Austell, August 2.

WHEAL JANE.

WHEAL JANE.

SIR,—It no doubt sounded very fine to Mr. Hocking's admirers to bear him hold forth in the manner he did at the special meeting, held on July 28, at Mr. Sharp's office. But, then, there are two sides to every question, and, as in this case, it not unfrequently happens that the first and most bombastic explanation is not the most truthful. In referring to Mr. H. G. Sharp's letter of the 7th ult. Mr. Hocking read the following: "I wish Captain Southey in his report to state what has been done in the past 12 months; how many hands are employed; how many engines, and what machinery is on the mine; and if the machinery and buildings had to be erected what they would cost." I estimated fifteen thousand pounds—not very far wrong, I fancy. But this is not all. I have received instructions from the same source several times before, both in writing and through the resident agent, who had great inducements offered him to forsake the weakest party. But, no, with honesty and truth, he was ever to be found, not like Mr. Hocking, who as soon as he saw a chance to join a stronger party at once deserted the one he had previously upheld. I have also been even asked to send my reports to this shareholder's office some time before publication, and I leave the public to judge whether that is not either an attempt to dictate or to warp one from his duty. But what surprised me most was Mr. Hocking's unsheathing his mighty sword, and, also, this gentleman's interpretation of the letter in question. He defied anyone to say there was a single thing in the letter which had the slightest appearance of dictation, or a single thing asked which a shareholder might not fairly enquire. But may I ask Mr. Hocking—Have not Wheal Jane adventurers a paid agent in London at the company's office, to whom all the agents reports are transmitted, and to whom all information concerning the working of the mine; and I still publicly say, in spite of the harmless enmity of selfish and ungrateful shareholders, that I was perfectly justified in r

the full effect of the letters read to me in Wheal Jane account house.

I come now to the question of calls, and I challenge Mr. Hocking to say he was in any way biassed by me to make a 5s. call. I never advised, proposed, or seconded the call—in fact, neither directly or indirectly had I anything to do with it. On the morning of the meeting almost Mr. Hocking's first words to me were, "We will make a 5s. call to-day." I must confess, however, I am very pleased to find Mr. Hocking intends to have at Wheal Jane clean balance sheets, for if my memory serves me truly he has in the past, in his official connections, elsewhere dealt with some dirtier by far than those left I behind me at Wheal Jane.

The fact is well known that when I went to Wheal Jane the mine was more than 2000l, in debt. Isay this without wishing to cast the slightest reflection on the late executive, for, as all mining men know, one cannot at all times in a poor mine keep everything in such thoroughout working order as he would wish. Consequent on the bad financial position of the mine the machinery and other appliances got into a very dilapidated state. I think, however, during hy management in new crections the shareholders have had justice done them, and should it be requested I am quite willing to leave the matter to the judgment of any unprediced mine manager. The mine is in a far better position now than when I took it in hand,

and not very straightforward in their weak endeavour to depreciate my past services.

Mr. Hocking also talks of my not being open and straightforward. I have no hesitation in saying that the more open and public this matter is made the better I shall be pleased, for I am certain no honest and straightforward man would sympathise with a mean and sneaking attempt to benefit some shareholders at the expense of the whole body. I consider a mine manager answerable for the just and proper management of a mine to the whole of the shareholders, who repose in him their confidence and trust, and in resigning my situation at Wheal Jane I did but protest in an emphatic manner against being influenced by money or position to act against the dictates of my conscience and the interests of outside shareholders.

In conclusion, I should like to tell Mr. Hocking that even if he

In conclusion, I should like to tell Mr. Hocking that even if he should choose to do so I will never permit myself to be made the miserable tool of others, but regardless of the filthy lucre with which sycophants are rewarded I will strike out boldly for liberty of action and honesty of purpose.

RICHARD SOUTHEY. and honesty of purpose.

West Chiverton, Aug. 4.

DISCOVERIES IN NORTH CARDIGANSHIRE.

DISCOVERIES IN NORTH CARDIGANSHIRE.

SIR,—North Cardiganshire having lately become again quite a busy scene owing to the many trials now being so successfully opened up, it may not be uninteresting to your readers to have a few remarks from an old inhabitant who is wholly disinterested. The first is the Bryn Dyfi Mine, which employs some 150 men at surface and underground; here there is a very fine lode, and a pile of ore from it, containing 100 tons of clean lead when dressed; and they are now erecting the dressing-floors: There is no doubt that this mine is now a permanent property. Adjoining this is the Ynys Tudor Mine; here they are driving a long cross-cut a lode, so that for the present it is not possible to say anything about the prospects. Further west is the Penryn Guvern Mine, alluded to in your paper last week; as to this, I can only say that your remarks upon it are fully justified, as the present appearances are all that can be desired, and when the shaft now sinking is down to a moderate depth there will be a good property. I saw some splendid lumps of lead and copper on surface.

South of this is the old Brynarian Mine, now about to be reworked; this mine produced over 14,000l. of lead ore from very shallow workings, and to my mind all that is required is to drive the deep cross-cut under these old workings. To the west of this is the Ynys Mine; here a most extraordinary deposit of lead ore was met with some two years ago, consisting of a solid rib of lead over 1 ft. wide, in a lode nearly 12 ft. wide, containing besides a good mixture throughout. Why this is not worked is a mystery to me, as it would be required to start it. I have heard of some fresh discoveries at the old Allt-y-Crib Mine, now being re-started under new auspices; but I will not trespass any further on your space this week, as I intend to see for myself next week.

Morben, Machynlleth, Aug. 4.

Morben, Machynlleth, Aug. 4.

CARDIGANSHIRE MINES.

CARDIGANSHIRE MINES.

SIR,—After reading in the Journal of the rich discovery of lead ore near Treidol, I made enquiries as to the exact spot, and found it was on a farm called Penrhyn Gerwen, and having occasion to pass the place I determined to see for myself. I found the captain of the mine on the spot, and he very courteously told me and showed me everything. They have certainly got one of the finest discoveries I have seen for some time. Capt. John Davis informed me that the mine was the property of a private gentleman, who intended to carry it on himself by sinking the shaft to 20 fms. deep. It appears this fine lode was discovered quite accidentally in cross-catting to find another lode said to be very rich for copper some years ago; this lode has not yet been cut, and they do not intend to drive for it until the shaft is down to the 10. I saw, however, some very fine stones of copper which came from some surface trial, also a very kindly gossan. There is a very good mine there now, and if they cut a good parallel There is a very good mine there now, and if they cut a good parallel lode there is every prospect of this turning out one of the richest mines in Cardiganshire.—Aug. 2. X. L.

LEAD MINING IN NORTH CARDIGAN.

LEAD MINING IN NORTH CARDIGAN.

SIR,—Having heard that some good discoveries of lead had recently between made in the district between the mining village of Talybont and Glandovey, I took the opportunity a few days ago of visiting the neighbourhood, and was, I must admit, well repaid for thus leaving the beaten track of visitors to this part of Wales. Several of the mines in the district are showing signs of life, especially Bryn Dyfi Mine, where there are some good piles of rich lead ore raised in driving the levels, and where about 150 men are now at work laying out dressing-floors, erecting water-wheel, making reservoirs, &c. This mine is under the charge of Capt. Thos. Williams, and promises to become very soon a very fine property.

At a place called Penrhyngerwen, near the roadside, a good discovery has also been made, and I understand the Ynys Mine is about to be re-started, as also one part of the Brynarian property, from which latter, according to a statement I saw in a local newspaper, 50,000l. worth of lead has been sold. I learnt also that they had lately come upon some rich lead ore at the old Allty-Crib Mine, now working as the North Cardiganshire Silver-Lead Mining Company (Limited), the consulting engineers of which are Messrs. D. C. Davies and Son, of Oswestry. I do not understand why, with such promising appearances as many of the mines in this district have, and with the natural advantages they possess, coupled with the cheapness of labour, they have not long since become permanent work now in progress and about to be commenced will, if proper such as a service of the mining to visit the district. The scenery alone will repay them, and they can rejoin the train (Cambridge and to the produce is exercised, meet with a handsome return. I strongly advise any tourists interested in mining to visit the district. The scenery alone will repay them, and they can rejoin the train (Cambridge) and the produce is exercised, meet with a handsome return. I strongly advise any tourists interested in mining t

MINING IN FLINTSHIRE, NORTH WALES. PIONEER MINING COMPANY--PANT-Y-PYDEW MINE.

FIGNEER MINING COMPANI—PANI—PIPER MINE.

SIR,—The short account of my visit to this company's mines, published in the Journal a few weeks ago, was evidently received by the directors in a friendly spirit. I have again called at the mines, and was much pleased to observe the progress made since my former visit. The new shaft, which had just then been commenced, is now sunk 20 yards or more. A winding-engine has been erected on it, with substantial pit head gear, &c. I saw some very fine specimens of galena raised from it, and knowing the district well, I have good reasons for believing that this shaft will yield an abundant supply of lead. It is well known that what is wanted at Pant-y-Pydew is a spirited development in length and depth: this is heing done, and spirited development in length and depth; this is being done, and in a systematic manner, and there cannot be two opinions as to what the result will be. Fine blocks of ore are also being brought what the result will be. The blocks of ore are also being brought to the bank from the engine-shaft, and the bottom of the old mine is nearly reached; this is where the great deposit of ore was left by the old company, who were compelled to abandon the workings for

want of funds to provide adequate machinery.

I continued my walk in an easterly direction until I came to another shaft called, I think, Bessies shaft. Here the workings are being carried on in a "flat." Many tons of rich lead stuff is to be seen on the surface waiting to be washed and prepared for market. I was much struck with the similarity of the matrix to that of the North Hendre Mine, where they have raised from a flat from 100 to 400 tons of lead per month. The company cannot, in my opinion, fail to establish itself as a great success, and the directors appear to be gentlemen of high standing and of thorough business habits, while the local management of the mine is also in good hards.

[For remain.ler of Original Corr spondence see this day's Journal.]

REPORT FROM CORNWALL.

**Agy.4.—Further advances in the tin market ought not much longer to be delayed if figures mean anything, for it is a very long time since there has been such as mean anything, for it is a very long time since there has been such as mean anything, for it is a very long time since where has been such as mean anything, for it is a very long time stop, should have its effect, for we are very much mistaken if the dividends of the last half of 1881 will not be very far in excess of those of any similar period for many years. How far they will be increased by the new ventures is a matter upon which it is rather too early to speculate; but the elder concerns never looked better.

of the gentry who bring discredit upon mining by their action, chiefly couched under shelter of the Limited Liability Act. The recent warnings given have apparently been of some service in checking the minitiplication of schemes that were only launched for the benefit of the promoters, and a speedy collapse of many bubbles may be anticipated. When the Master of the kolls goes so far as to characteristic and the service of the service of the control of the promoters, and a speedy collapse of many bubbles may be anticipated. When the Master of the kolls goes so far as to characteristic and the service of the service

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

August 4.—Business in the iron trade continues quite as good as it has been during some few weeks. Cold blast pigs are quoted 4..2s. 6d. to 4l. 5s. per ton. All-mine irons, the product of the shire, are still quoted from 3l. to 3l. 5s., and hematites 3l. 5s., but in some isolated cases the price of best pigs is more negotiable than it has latterly been. Part-mine qualities are 50s., and cinder qualities 37s. 6d. Blast-furnace proprietors are finding customers more willing to accept consignments on orders taken some time back, and instances are within my knowledge in which this favourable sign has enabled stocks to be fairly well reduced. Of finished iron common bars and hoops and sheets are moving off best. Bars range from 7l. for marked qualities to 5l. 15s. for commons. Hoops are being bought on behalf of cotton-growing countries for hooping wine barrels. Sheets are now mostly being bought by galvanisers at home and by merchants for exportation to Russia, India, Australia, and New Zealand. While sheet makers do not obtain any advance upon the prices of a fortnight ago, still they are quite firm at the stronger rates they then de-

exportation to Russia, India, Australia, and New Zealand. While sheet makers do not obtain any advance upon the prices of a fortnight ago, still they are quite firm at the stronger rates they then demanded, and they experience only little difficulty in getting those prices. Boiler plates are still priced at 81. 10s. to 91. 10s.

A highly important proposition came on Wednesday before the South Staffordshire Mines Drainage Commissioners at a usual monthly meeting. The Chairman, Mr. Walter Williams, submitted a statement, which showed that whereas the annual income of the Commission is only 20,0001, the expenditure is 27,0001, and to secure the additional income he suggests that they go again to Parliament, and seek an increase in the maximum rate to be levied on a ton of coal to 1s. That rate at present is 6d. The increase it is calculated would enlarge the capital quite 10,0001. The matter has been transferred to Committee.

The Operatives' Council'of the South Staffordshire Mills and Forges Wages Board have issued a circular to the ironworkers of Lancashire, Derbyshire, Cheshire, and South Yorkshire, reminding them of their obligations. Seeing that the South Staffordshire Board practically regulates wages in all those centres; these, the circular points out, cannot consistently object to pay part of their expenses. The sum applied for is 1s. each ironworker yearly. The employers' section of the board is in correspondence with the ironmasters in the districts mentioned upon the matter of contributions from thos

centres towards the maintenance of the board. It is understood that if the new districts will contribute they may elect representatives on the board, and some of the present members will give way for them.

TRADE OF THE TYNE AND WEAR

Aug. 3.—The shipments of coal and coke on the rivers has continued very large during the past week. At Tyne Dock for the week ending on Thursday the total shipments reached 101,000 tons, 6000 tens above the previous week, and considerably above the summer average. The best gascoal works in Durham are very fully employed, and as most of them have considerable contracts they are expected and as most of them have considerable contracts they are expected to be fully employed for some time to come. The house coal works in Durham are also better employed at present, and there is a better demand for manufacturing coal and second-class steam coal. The position of the best steam coal works is much improved; there is an abundance of orders on hand, and prices are consequently improving. There has not been much actual advance in the price of coal and coke as yet, but the tendency is certainly towards increased value in all kinds of fuel at present in those rivers, and increased rates have been secured in some instances. The operations at the extensive new collieries at Marsden are being pushed forward vigorously. The first shaft is now being sunk through the shales by the ordinary thethod of hand labour, but several improvements have been introduced in the details, by which the progress made is much accellerated. The total depth now reached from the surface is 330 yards, and as he particular obstacle is expected the progress down to the main The total depth now reached from the surface is 330 yards, and as he particular obstacle is expected the progress down to the main seam is expected to be rapid a few months will suffice for the completion of this part of the work. The securing of the second shaft by cast-iron tubbing, after the preliminary boring out by the Chaudron system, is now considerably advanced, and when this is completed the sinking of this shaft by the ordinary method through the shales will be proceeded with. A large quantity of limestone is now worked from the valuable beds here by this company, and sold to chemical works and for various purposes.

chemical works and for various purposes.

The Seaham Colliery explorations in the Maudlin seam have been continued, and proofs of an extensive fire having existed before the closing of this seam have been found. In some localities the coal and shale have been on fire, and the timber has been burnt, and of course the roof has fallen in consequence. Those extensive falls have obstructed much the progress of the explorers, but two bodies Were discovered on Saturday in the pony-way, not far from the face of the workings; both bodies were identified, one as Joseph Corvey, and the other as Thomas Cummings; from the position the men were found in it is evident that they had died from the effects of the after damp, the explosion occurred outside of all the workings in all the seams, and thus the after-damp resulting cut off the retreat of the men. There are still 27 bodies in the seam, and it is anticipated that they will be found near the face of the workings, but it is not yet known what obstacles are in the road; it is, however, probable that as the point reached by the explorers is beyond the region of the

explosion, rapid progress will now be made, and the bodies may all be discovered very shortly.

The annual demonstration of the Durham miners took place at Durham on Saturday, and the meeting was a great success. It is estimated that 40,000 people were present. The meeting was addressed by Mr. Burt, M.P., Mr. Crauford, Mr. Macdonald, M.P., and others. The speakers urged on the miners the necessity of keeping the Union organisation up in all its integrity, and congratulated them on the solid and healthy condition of the Union at present.

Mr. Burt remarked on the Seaham Colliery explosion that the origin. Mr. Burt remarked on the Seaham Colliery explosion, that the origin Mr. Burt remarked on the Seaham Colliery explosion, that the origin of this catastrophe was still enveloped in mystery, and dwelt on the necessity of more attention being paid in future to the coal dust found in dry deep mines. The experiments made with coal dust showed that its presence mixed with foul air intensified an explosion, and that there was a mixture which could scarcely be detected of inflammable gas and fine coal dust which might produce an explosion. Mr. Crauford and Mr. Macdonald alluded to the great increase in the production of coal from the mines of this county, and the small profits realised by the coal masters, and the low wages received by the miners. Both those speakers appear to favour the idea of the by the miners. Both those speakers appear to favour the idea of the production of coals being reduced in some way so as to bring the supply down to the demand, and thus ensure higher wages and better

Profits.
There is no doubt that the competition amongst coalmasters and tremmasters has been, and continues to be, severe; it has brought many even large firms to the verge of ruin, and some, it not many, the pressure, but there is, we believe, no artificially a seven by to the pressure, but there is, we believe, no artificially a seven by to the pressure. will yet succumb to the pressure, but there is, we believe, no artificial remedy for these matters. The capital has been embarked in those concerns in good times, and it cannot be taken out of them without ruinous loss; the battle must, therefore, go on until the equilibrium is restored by the operations of the laws of supply and demand. This process is going on, and will, we believe, ultimately result in a more healthy state of affairs in connection with the coal and iron trades. These trades are now very extensive, and while concentrated in certain localities are also spread over a large area, extending from the east to the west coasts of the island, and from Cardiff in South Wales to Glasgow in Scotland any attempt to restrict the output in any locality has simply the effect of driving buyers to other districts. Coal and ironmasters are bound to keep their works going full time if possible, and the working men are bound when they have the chance to work a full day's work. There is, we believe, no other course open to them.

is, we believe, no other course open to them.

The pig-iron trade has been steady during the past week, but prices have been a shade weaker. The proposal made by the Cleveland ironmasters to reduce the make in combination with the Scotch masters having failed no action will now be taken in the matter, and stocks if they do not increase now will certainly do so before the ond of the year, unless the demand continues to increase. It is known, however, that some furnaces will be stopped for repairs, and some of the weaker masters will no doubt reduce the make Warrants are at 38s. No. 3. Messrs. Connell's holdings are now 184,000 tons, nearly an increase of 1151 tons on the week. The shipments of pig-iron have been well kept up. The feeling in the manufactured iron [trade continues steady, and the future of the trade is considered to be very promising. Considerable activity prevails. Prices are steady all round for all kinds of finished iron: Ship-plates, 6l.; common bars, 5l. 12s. 6d.; best bars, 6l. 2s. 6d. The platers' helpers have returned to work on the Tees. There is a good steady enquiry for coal and coke at Middlesbrough. Coke is from 10s. 6d. enquiry for coal and coke at Middlesborough. Coke is from 10s. 6d

to 11s. 6d., delivered there.

INSTITUTION OF MECHANICAL ENGINEERS.—The summer meeting of the members of this Institution was held in the rooms of the Literary and Phile phical Society, Newc on-Type durin the present week. The opening meeting was held on Tuesday, when the Mayor of Newcastle, Mr. Angus, received the members, and welcomed them in feeling and suitable terms to Newcastle-on-Tyne.

The opening address was given by the President of the Institute,
Mr. Cowper. It was an able resume of the inventions and improvements effected in connection with mechanical engineering during the past twelve years. The first paper read was by Mr. I. L. Bell,
"On the Tyne as connected with the History of Engineering." The
paper is a rapid but able sketch of the rise and progress of all the great industries on the Tyne and Wear. The discovery of numerous and valuable beds or coal of course laid the foundation and furnished the means of working all those industries, and indirectly also has led to the formation of railroads, the improvement of stationary engines to the formation of railroads, the improvement of stationary engines of all kinds, and the inventions and present state of perfection of the locomotive engine. In the year 1713 the Newcomen engine was erected at Norwood and other places, and employed in pumping water from the mines, the coals being then drawn by horse-gins and water-wheels. In 1784 the first engine of Watt was erected at the Walker Colliery, and since that time great improvements have been made in college, explore each being the transfer.

Simpson an account of a pumping engine erected on the Tyne. The value of the coal consumed by this engine was about 300*l*. per annum, but the additional cost of the engine, as compared with a noncondensing engine of the same power, was about 300*l*., and he deduces from those figures that the margin of economy in the use of coal was insufficient to cover the increased outlay and cost of working. This we consider to be a mistake. Improved engines and boilers must in the long run tend to general economy in the working of collieries, and it must be borne in mind that coal must in the course of events increase in value. It is absurd to suppose that because at collieries coals are got at a cheap rate the machinery used

is to remain for ever far behind that in use for all other purposes.

The engines in use in this district at iron and other works will, we believe, bear favourable comparison with those used in other parts, believe, bear favourable comparison with those used in other parts, while in this district the marine and locomotive engines have been vastly improved of late years. Generally speaking little improvement has been effected in the machinery used in collieries during the past 12 years, but there are some exceptions. Mr. Daglish has introduced improved winding engines at Silksworth, and by these engines 4 tons of coal can be drawn from a depth of 300 fms. in about 50 seconds. These engines are high pressure non-condensing, and they are provided with improved valve gear for cutting off the steam, and using the steam expansively. The result is, we believe, great efficiency and also economy in the use of coal, and this is a very important matter in collieries as well as other works. But looking at the enormous saving of fuel in the modern marine engines, there appears to be no reason why compound engines should not be employed at collieries. The consumption of coal in the best marine engines, lieries. The consumption of coal in the best marine engines, we believe, does not exceed one-fourth of the amount consumed in colliery engines for the same amount of work done. Of course we now allude to the ordinary colliery engines, and this must be remedied

sooner or later.

The next paper read was by Mr. F. C. Marshall, of Newcastle, "On the Progress and Development of the Marine Engine." This is a most interesting and important paper, and it bears immediately on the subject we have made some remarks on above, but we must re-

serve comment on this and other papers until next week.

Some of the papers, particularly that of Mr. N. C. Cookson, of Newcastle, "On Some Recent Improvements in Lead Processes," will be published in next week's Journal.

REPORT FROM NORTH WALES, SALOP, AND CARDIGAN.

Aug. 3.—The slate quarries in the Nantle district are busy, and me hears of the re-starting of old quarries and the commencement of new ones. It seems strange that the quarry proprietors cannot unite and carry out some effectual deep drainage scheme which at the same time would enable them to get rid of their debris. We hear of some quarries giving enormous prices for the necessary tip-room, while others must shortly stop work from the want of it. Are no steps taken to meet this difficulty owing to the present proprietors thinking that they have sufficient to last out their own leases, thus postponing the matter, and leaving the burden to be borne by their successors. At the Foel Clynnog Slate Quarry the work of uncovering the good slate-rock met in depth is progressing, and steps are being taken for the erection of suitable winding machinery.

The Aberdovey Import and Export Company are pushing forward their arrangements for the commencement of operations, and are on the look out for a working manager. The Share List is to be closed

on the 20th.

on the 20th.

We notice the letter on the Cardiganshire Mines in last week's Supplement, and as far as it concerns the Bryn Dyfi Mine are able to corroborate it. The crushing and dressing machinery for this mine is now being delivered, the former by Messrs. J. and D. Davis, of Machynlleth, and the latter by Messrs. Williams and Metcalfe, of Aberystwith, and the erection of them will commence at once, as the company intend we understand to put one intended to the market before. mpany intend, we understand, to put ore into the market before

The inquest on the body of a man killed at Preesgwyn Colliery, which we reported as adjourned last week, has closed, the jury saying in their verdict that no proper means had been provided by the company in order to prevent such an accident. The chief Inspector, Mr. Thomas Wynne, stated in the course of the enquiry that he never intended again to give permission to any company to employ an uncertificated underground manager, as had been done in this case, when it was given to an underground manager who was preparing to

The return of Her Majesty's Inspector of Mines for the year 1880 hows that in this district there were a total number of 14,989 per employed above and below ground at the mines under the Coal Mines Regulation Act during the past year, while the amount of mineral raised was 2,334,315 tons of coal, 61,973 tons of fire-clay, 283,102 tons of ironstone, and 11,183 tons of oil shale. three counties of Salop, Flint, and Denbigh This is spread over the

TRADE IN SOUTH WALES.

Aug. 3.—Mr. Morgan, of Pontypridd, attended a meeting of delegates at Aberdare on the 1st inst., and laid before them his plan of drawing foul air from the mines, which he professes to be able to do to the extent of 2,000,000 feet per day. At every place where he has exhibited his plans they have been well received, and as the delegates present on the 1st inst. represented 50,000 colliers, they may be said now to be fairly put before the whole body of colliers of the district. Mr. Morgan has patented his invention, and asked the workmen to help him in carrying it out. He will place his plans in a few days before some members of Parliament in London who are connected with the coal trade, so that its practical value may be in a few days before some members of Parlament in London who are connected with the coal trade, so that its practical value may be thoroughly tested. The delegates at the meeting resolved to recommend that Mr. Morgan should have pecuniary help, as there seemed little doubt that the inventor could do all that he had promised. At the same gathering it was resolved to try to bring about one uniform sliding scale for the whole kingdom. The steam coal trade of Cardiff and Newport is as active as ever, 116,752 tons having been shipped to the forest series of the wrest way 16,913 tons at the latter. and Newport is as active as ever, 116,752 tons having been shipped at the former port during the week, and 16,913 tons at the latter. Swansea may be said to have improved somewhat, but not to a satisfactory extent. Orders are plentiful at the two other ports, and shippers feel inclined to close their books against any more at present. The pitwood trade is fairly active, although only 2211 tons have been received since last report. At Caerphilly the coal trade seems dull just at present, owing to the temporary stoppage of the Wernddu Colliery by the Government Inspector. Another colliery, the Hendredenny, has been stopped altogether, as the coal has been totally worked out. A new colliery, however, is projected in the district, which will help to put a new face on matters.

The iron and steel industries keep up a well sustained activity, and there is no complaint of want of orders. The quantity shipped at Cardiff last week was only 3999 tons, but large quantities go away

at Cardiff last week was only 3999 tons, but large quantities go away by rail, about which no returns are given. The amount of ore received at Cardiff since last report has been 971 tons, but the low condition of the water at Bilbao will partly account for this state of things, as there is a bar there which prevents ships coming out when the tide is low.

the tide is low.

The tin-plate industry is in much the same condition as when last reported. The Rhiwderm Tinworks have been taken by Mr. Morris, of Risca, and will shortly be re-started.

At the Duffryn Tin-Plate Works, near Morriston, a new pickling and swilling machine was successfully started on Thursday last. The machine was made by Messrs. Taylor, Struve, and Company, of Neath (who, in conjunction with the well-known Mr. R. J. Hutchings, have parented several improvements in pickling machines), and erected patented several improvements in pickling machines), and erected within three days in the stead of a rotary machine, also Mr Hutching's patent, to which it is very much superior. The starting was witnessed by a number interested in the tin-plate trade, who was witnessed by a number interested in the great improvements have been made in collery engines and boilers, but yet, generally speaking, expressed themselves as very highly satisfied with the ease with there is great room for further improvements in this direction. Mr. bell remarked that the proper test for ascertaining the excellence of a steam-engine is the amount of duty performed for a given weight of coal consumed and measured. By this standard we cannot claim for this district a very high position. He quoted from Mr. J. B. pany were so pleased with the working of the machine that another duty performed for this district a very high position. He quoted from Mr. J. B. pany were so pleased with the working of the machine that another duty and the first excluded the provisions of second provided that the business of the company should be comp

has since been ordered. The Cwmfelin Tin-Plate Company have also had one erected at their works, with the same gratifying result, and another is in course of making for that firm.

REPORT FROM DERBYSHIRE AND YORKSHIRE.

Aug. 4.—There has been nothing new to report as regards the state of the Iron and Coal Trades of Derbyshire, neither of which are at all active, but as a rule rather the reverse. There are still the same number of furnaces in blast, but the demand for pigs is by no mean equal to the output, whilst prices were not so firm as they have been the manufactured iron there is a little more doing, but the point of the property of the equal to the output, whilst prices were not so firm as they have been In manufactured iron there is a little more doing, but the milk are by no means well or fully employed. At the collieries business is particularly quiet as regards households qualities, and the prices at the pits are still below the paying point. Steam coal has been going off better of late, and the pits connected with the Manchester and Sheffield Railway have been sending a fair ton nage of steam coal to Hull and Grimsby. There is marked activity the Dronfield Steelworks, where something like 2000 tons at the Dronfield Steelworks, where something like 2000 tons. at the Dronfield Steelworks, where something like 2000 tons an

being produced daily.

In Sheffield the mills are working well, and the output of steel in particular has gone on increasing for some time past. Rail maker were never busier than they are just now, whilst there is also a large production of railway material in the shape of tyres, axles, wheely the output of the output of the production of railway material in the shape of tyres, axles, wheely the output of production of railway material in the shape of tyres, axles, wheels, springs, and sleepers. The cutlery houses are well employed, heary orders being in hand for table and pocket knives, America remaining one of our best customers. There is a heavy output of composite armour-plates, as well as of those made of iron for boiler makers and shipbuilders. The works connected with Sir J. Brown and Co.'s vale establishment at Swinton, after standing for about seven years, are being put into working shape, and will shortly be in full operation, a proof in itself of the increased business which is now being done.

At the collieries in South Yorkshire business is quiet, and the mea are working short time. Colliery owners state that they are working their pits at a loss, and do not intend continuing to do so. There in therefore, every probability that the wages question will during the next week or two be the main point for discussion amongst the miner of the district, but no interruption to trade is likely to take plane in the state of the district, but no interruption to trade is likely to take plane in the state of the district, but no interruption to trade is likely to take plane in the state of the district, but no interruption to trade is likely to take plane in the state of the district in the state of the state of

of the district, but no interruption to trade is likely to take place

on sequence.

At the Yorkshire Railway Wagon Company half-yearly meeting on Thursday (Mr. H. Robinson, chairman of the directors presiding the balance-sheet was adopted, and 5 per cent. dividend declared. The Chairman stated that on the whole the concern was in a sounder and safer position than for the last few years.—The North Central Wagon Company (Rotherham) directors recommend a dividend for the past half-year at the rate of 8 per cent. per annum, free of income tax, carrying 600% to the reserve fund, and the balance of 180%. 6s. 9d. forward to next half-year.—Mr. T. B. Ball, manager at the New Wortley Gasworks, Leeds, has been appointed to fill similar position at the Rochdale Corporation Gasworks, at a salary of 300% a year. Mr. Ball's salary in Leeds was 175% a year, with house, coals, and gas.

CAPITALISTS, AND DECEPTIVE PROSPECTUSES.

Decisions of the highest importance to investors in public companies have been given in the Chancery Division of the High Cour of Justice, by the Master of the Rolls, in the case of the Great When Polgooth Company, and by Vice-Chancellor Bacon in that of the Silver Valley Mines. The ground of complaint was virtually the Silver Valley Mines. The ground of complaint was virtually the same, misrepresentations in the prospectus, and the concealment of material facts, and the remedy applied has been similar—orders to reimburse the applicants for shares with interest and costs. These decisions practically annihilate the companies, for as it may be assumed that every bona fide applicant for shares was attracted by the same misrepresentations, so it may be assumed that every applicant is equally entitled to claim a return of his money. The Great Whell Polgooth matter came before the Master of the Rolls on a motion by Mr. A. Baillie, an allottee of 600 shares, that his name might be moved from the register of shareholders, on the ground that he had been induced to apply for the shares on the faith of untrue and mis leading statements in the prospectus, and in consequence of the con-cealment and suppression of material facts relating to the company and that the company might be ordered to pay the applicant 150, the amount paid on application and allotment, and interest there from the date of payment. The prospectus was sent to the applicant by post on March 19, and he subsequently applied for 600 shars in the company on the faith of the statements therein contained. in the company on the faith of the statements therein contained: and on March 22 he received an allotment of the full number applied for. On March 22 the applicant paid the company the sum of 90% on allotment. The prospectus set out in red ink at the top the following statements:—"This mine has already returned, it is estimated, over 200,000% in profits, while the 5% shares rose to 195% each. This too, with the disadventee of inferior machinery. The reports

mated, over 200,000. in profits, while the 5t. shares rose to 195t. each. This, too, with the disadvantage of inferior machinery. The reports show that there are now 2,000,000t., worth of ore in the mines. Notice to produce the above "reports" had been given to the company, but they were unable to do so, and there was no evidence at to the truth of the other facts above set out. That anyone can be deceived by such palpably absurd statement led to the suggestion that those who so recklessly part with their money should be made to lose it as a punishment for their excessive stupidity; but as the law is intended to check the career of rogus, whether they practise upon men of business or mere speculating imwhether they practise upon men of business or mere speculating imbeciles, Mr. Baillie and Mr. Postans, who obtained a similar order in his favour, may be congratulated on the result. To suppose this in his favour, may be congratulated on the result. To suppose this the owner of 2.000,000*l*. worth of ore would be inclined to sell it is a public company for a few thousands is altogether unreasonable, except upon the assumption that the vendor well knows that the cost of getting the ore to market will be as great as its nominal value, and if such an assumption be correct there is really nothing to attract the investor if the true facts of the case be put before him. But in this case even the reports of the ore in the mines were set the tensing or that Mr. (Clipter, O.C. and Mr. Grovepor, Woods.) who represented the applicants, had a comparatively easy task whilst that of Mr. Ince, Q.C., and Mr. Grosvenor Woods, who represented the applicants, had a comparatively easy task whilst that of Mr. Ince, Q.C., and Mr. John Cutler, who appeared to whilst that of Mr. Ince, Q.C., and Mr. John Cutler, who appeared the company, was correspondingly difficult. In the result the Master of the Rolls expressed the opinion that the statements the prospectus were absolutely untrue, and that it might be need sary to take proceedings in another Court against the gentleme who had got up this company. His Lordship said it was clear that applicant's name must be taken off the register, and he ordered the company to repay the 150l. paid by Mr. Baillie, with interest at per cent. from the time of payment. He also ordered the company to pay the costs of the motion. A similar order was also made in the case of Mr. Postans, who applied for and had been allotted 48 the case of Mr. Postans, who applied for and had

shares in the company.

The decision in the Silver Valley Mines case is even more externed the other than the o ive in its application to protect careless investors than the other The practice of introducing clauses in the Articles of Association which first directors are exempted from qualifying to the extent heir successors, by which they are retained in office for a fix period, and by which they are retained in office for a fix The practice which first directors are exempted from qualifying to the extensive their successors, by which they are retained in office for a fixed period, and by which various privileges and immunities are attempted to be secured to directors or officers of the company vendors, and others, has become so common that it may safely be said that there are but few companies in which the general body of the companies of the comp shareholders possess the protection which the General body shareholders possess the protection which the Companies Acts in tended to give them. The Silver Valley Mines is but one of the more glaring instances. The case came before the Court on an application on behalf of Mr. F. H. Landon, and seven other gentlements have their names were considered. to have their names removed from the register of members of the company, on the ground of fraudulent misreprentations in the properties of the company of return to them of the money paid on the shares they had applied for with interest. The shares were applied for on the faith of the prospectus, in which four well known names appeared as directors. the n the c as to reserv

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ager, as may be agreed;" that in the meantime, and until the same to altered in general meeting, the business of the company should be conducted by a manager; and that the first manager should be a person there named, and "he shall not be deposed unless by a special resolution signed by three-fourths of the shareholders." The 4th Article provided that "the manager may, whenever he thinks it, convene an extraordinary general meeting by giving 24 hours' into one an extraordinary general meeting by giving 24 hours' into every and the statements in the prospectus, upon phicants that, apart from the statements in the prospectus, upon which no evidence was offered, no one could be held liable to take shares in a company in which there were to be no directors until the manager chose; that manager, too, being absolutely irremovable except by a practically impossible resolution.

The motion was supported by Mr. Napier Higgins and Mr. Grosvenor Woods, whilst Mr. Millar, Q.C., and Mr. Everitt represented the company. The abuse of the powers placed in the hands of promoters was in this instance so obvious that the company's case was from the first utterly hopeless, and in the end the Vice-Chancellor said the only point he had to be satisfied upon was that the applicants had applied for these shares and paid their deposit; and this point was proved—that as to the so-called Articles of Association, they were a mere fraud and abuse, which could bind no one. His Lordship, therefore, ordered the applicants' names to be struck off the register of members, and their deposits to be returned within four days, with interest thereon at the rate of 5 per cent. from the date of deposit. The value of this decision to shareholders is inestimable, and the protection which it affords them is enormous, for wherever it can be shown to the satisfaction of the Court that inequitable articles have been introduced to the prejudice of the subscribers for shares the return of any money paid will be readily recoverable. And the advantage will also where. But if the decisions lead to every company unable to pass the ordeal removing the objectionable features connected with their constitution all may have reason to congratulate the promoters of freat Wheal Polgooth and Silver Valley upon having gone a little too far, and thus made known an infallible remedy for a great and

The warm reception ebtained from the Master of the Rolls and the Vice-Chancellors made both "companies"—the term company in this instance meaning the individuals inculpated—most energetic to get out of the clutches of the London Courts and retire to the quietede of the Vice-Warden's Court at Truro, but their failure has bappily been complete. On Saturday, July 30, Vice-Chancellor Hall made an order appointing a provisional liquidator for winding up the silver Valley Mines, and on Tuesday this was appealed against in the Court of Appeal (before the Master of the Rolls and Lords Justices Brett and Cotton), but the Master of the Rolls, the Lords Justices concurring, said that this was an application to discharge an order of Vice-Chancellor Hall, on the ground of want of jurisdiction to make the order. But the Vice-Chancellor's order was made on a petition of Vice-Chancellor Hall, on the ground of want of jurisdiction to make the order. But the Vice-Chancellor's order was made on a petition which showed on the face of it that the Court had jurisdiction, and those who alleged a want of jurisdiction were bound to show that there was none. The words of the Companies Act, 1862, sec. 81, on which the appellants relied, were tolerably plain and meant what they said—that in the case of a company "engaged in working any mine within and subject to the jurisdiction of the Stannaries," the mine within and subject to the jurisdiction of the Stannaries," the proper Court for winding up such a company was to be the Stannaries Court, unless the Vice-Chancellor certified that in his opinion the company would be more advantageously wound up in the High Court of Chancery. In giving a local jurisdiction the Legislature intended to meet the case of local claims against a mine which had been working in the particular locality. as of tradesmen who had supplied the company with goods or for wages—where, in short, there was a reason for carrying on the winding up in the locality. Sec. 81 did not, however, apply to a case where no mine had been acquired, or where the company having a mine had not opened it. Now, this tompany was really not formed for the purpose of working mines in Cornwall, but for the purpose of acquiring mineral property in Cornwall or more and—elsewhere, so that the company might consistently with the prospectus have carried on mining operations in Derbyshire.

Comwall, but for the purpose of acquiring mineral property in Cornwall to—net and—elsewhere, so that the company might consistently with the prospectus have carried on mining operations in Derbyshire. No deubt the prospectus showed that the company contemplated purchasing a mine in Cornwall, but that was not enough. There was no evidence that this company ever had a mine or ever "engaged in working any mine" in Cornwall. The appellants, coming without any evidence of the fact they sought to establish, were not entitled to ask the Court to assume what might be the result of such evidence if it could be obtained. The appeal was dismissed with costs.

In the case of the Great Wheal Polgooth the discomfiture of the "company" was no less complete. The question was raised in a motion before the Vice-Chancellor Bacon for an ordinary winding-up order, and the grounds for removal to the country were nearly similar. Amongst other arguments on behalf of the company it was contended that, although it was sworn that the plant on the ground was not worth 5t., and that no more than two men were at work on the spot, yet as "mining operations" had actually begun, the Court had no jurisdiction, and the company ought to be wound up by the Vice-Warden of the Stannaries; but the Vice-Chancellor said his surprise was that any one could be found to argue against the motion with gravity and pretence of seriousness; or could attempt to question the jurisdiction of the Court to deal with so scandalous an affair as this. Evt. pody, but a very few persons who called themselves the company, desired to have a winding-up. The prospectus was a fraud, a sham, and a misrepresentation. It said there was a mine on the property. Perhaps there once had been a mine which had become exhausted. It was sufficiently clear that there was no mine there now, notwithstanding the evidence of a gentleman who said he had been down the shaft and brought up some pieces of ore with lim. If the charges in the petition were true there were criminal and civil courts of the Companies Acts be insufficient to reach such malpractices. That, however, was not now before the Court. The Court being satisfied that the company could not possibly go on, the winding-up order must be made. As to the appointment of the provisional liquidator, it would be continued until the appointment of an official liquidator was made in Chambers; and the conduct of the petition would be given to Mr. Marten's and Mr. Locock Webb's clients (that is to say the non-recanting portion of the plaintiffs in the original suit against the company). The usual order as to costs would be made except as to the costs of the company, as to which the order would be reserved. nnies Acts be insufficient to reach such malpractices

NEW VEGETABLE LUBRICANT.—An improved artificial tallow or grease, of which the principal ingredient is vegetable matter, has been invented by Mr. M. DE LA VEGA, of New York. He states that this artificial tallow is to be used for lubricating purposes for the manufacture of soap, candles, &c., and for other similar purposes, but is not to be used for articles of food. The principal vegetable ingredient is the oil of the castor bean, though he does not confine out is not to be used for articles of food. The principal vegetable ingredient is the oil of the castor bean, though he does not confine himself to this particular vegetable oil. He mixes together 60 lbs. of castor oil, 10 lbs. of animal tallow, 10 lbs. of vegetable oil, and 20 lbs. of wheat flour. The other vegetable oils that may be used are rape and turnlp seed oil, ootton seed oil, or any other similar oil. The above ingredients in the proportions stated are to be put together in a vessel, and hoiled for about 30 minutes by gream heat; it is of castor oil, 10 lbs. of animal tallow, 10 lbs. of vegetable oil, and 20 lbs. of wheat flour. The other vegetable oils that may be used are rape and turning seed oil, cotton seed oil, or any other similar oil. The above ingredients in the proportions stated are to be put together in a vessel, and boiled for about 30 minutes by steam heat; it is

then cooled and solidifies and hardens into artificial tallow. The process of cooling can be facilitated by pouring cold water around the vessel or receptacle which holds the mixture.

Meetings of Public Compantes.

WHEAL PEEVCR.

WHEAL PEEVCR.

A four-monthly meeting of adventurers was held at the accounthouse on Tuesday, Mr. T. Pryor, the purser, in the chair. There was not so large an attendance as usual. The statement of accounts showed that the labour cost amounted to 4253l.; merchants' bills, 1456l.; rates, &c., 118l.; subscription to dynamite defence fund, 10l.; lords' dues, less income-tax, 340l. On the other hand there had been 127 tons of black tin sold at an average price of 57l. 9s. per ton, and realised 6514l.; extra carriage received, 16l.; tin leavings, from June 10 to July 29, 475l.; old iron, &c., sold 39l.—making a total of 7046l., and showing a profit of 856l.

The CHAIRMAN stated that the balance in hand at the last meeting was 2168l., less the dividend of 1500l., making the balance 666l., which, added to the present profit, left a sum to be dealt with of 1542l. The tin bills were on the table, and he might say that the amount was not quite as much as they had every reason to expect; but when they heard Capt. White's report the reason would, he thought, be satisfactorily explained. The average price of the tin sold was 51s. 9s. as against 51l. at the last meeting. The agents reported as follows:—

whether, due to the presence period. One is not because the whole, and the total presence period of the control of the presence period of the control of the period of the

what he wanted to do was that Wheal Peevor adventurers should look after themselves. They were bound to take every possible step to protect themselves. He thought it was very desirable to have independent advice and judgement. He had every confidence in Mr. Michell's honest judgement, and he had no idea that what he said would be opposed by an independent agent; but still h would like to have the opinion of an independent agent, and that of the agent of the lord. Capt. White said at the last meeting he was instructed to drive the 70 not further than 5 ins. within the boundary for the present. He had now driven the level to that distance, and he should like to know whether he was to drive any further now?—Mr. Throny-sox thought he should wait till the committee met, and this was agreed to, seeing that it was part of the question between the two companies.

further than 5 fms. within the boundary for the present. He had now driven the level to that distance, and he should like to know whether he was to drive any further now?—Mr. Thomysox thought he should wait till the committee met, and this was agreed to, seeing that it was part of the question between the two companies. Prespi to a question whether more men could not be put on to drive the 50 cast to cross-cut the lode, said they had 31 men now on tutwork, cross-cutting, and entirely exploring the mine. They hoped in a week's time to communicate with the main in the shaft, where other men were cross-cutting east of the chaft, and after that these men would be at liberty to go to the 50 cast without increasing the tutwork.

Mr. McELLs suggested that some men should be put to costean on the north part of the sett with the view of finding the Great North Downs copper iodes, which must stand there in whole ground.

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necording to the engineer's promises. They had expressed themselves highly pieased at the progress that was being made, and hoped to get the engines in working order within six months. The shaft to be sunk in the north mine would not be commenced until the adit level was clear. The agents wished to ascertain the necessary underlie of the lode, so that they might sink the shaft in a certain position, which would attack the lode at a certain depth, and expected to get the level clear in about a week. They-would then be in a position to mark the spot for the shaft and building of the engine-house in the north mine. They had met with considerable difficulty in bringing up the adit level, as in some places the whole adit had formed. They had cleared over 400 fathoms, and had met with enany obstacles, the water in the mine, which was, of course, dammed all up to the surface, having made considerable danger and risk. He was glad to say that no lives had been lost, although in tapping old ground there was sometimes great difficulty and danger. In this instance the men were away at meals when the water broke away, otherwise he should have had something unfortunate to report. The water was now let down to the adit, and the work was being prosecuted with the utmost vigour, and engines had been purchased at a low rate. In the west mine no engine beyond a portable one would be put there now until they had ascertained what sized engine would be required, which would depend upon the size of the lode and the water. They were bound to have a lot of water, and there was an old saying that "the more water the better the ore." Where there was a large quantity of ore, and the portable engine at 16 fms. from the surface on the west ground would have as much as it could do to keep the water down. (Hear.)

Mr. FRED. Biog asked if the shares had been fairly and completely paid up. The only reason why the company had not had a quotation on the stock Exchange was a much as it could do to keep the water own. (Hear.)

A SHARHOLER found fau

thought necessary.

There being no resolution before the meeting the proceedings terminated with a vote of thanks to the Chairman and directors.

GREAT WHEAL POLGOOTH MINING COMPANY.

A special meeting of shareholders was held at the City Terminus Hotel, Cannon-street, on Wednesday. The meeting was convened by Mr. Turner, the solicitor of the company, but at the time ap-pointed for the meeting Mr. Turner was unable to be present as he was under cross-examination in Court, and his representative asked that the meeting might be adjourned until 2:30 that day, but the shareholders declined to accede to the request; and, on the motion of Mr. COURE, Mr. H. S. Wild, one of the original directors of the company, was called to the chair.

shareholders declined to accede to the request; and, on the motion of Mr. Cooke, Mr. H. S. Wild, one of the original directors of the company, was called to the chair.

Mr. Snell stated that he represented the holders of 8000 shares in this company. Major Fortescue (one of the directors) asked him to represent him at the meeting, but he declined. Major Fortescue said that he intended to commence proceedings as ainst Mr. Lodra Rollin Reynolds for having induced him by false pretences to take shares in the company. The Chairman said that when the prospectus was shown to him it was read over. He asked those who were their representing the company whether the statements could be verified. It was stated that they could, and giving credence and faith to the persons around him he accepted them. Subsequently there were doubts entertained with regard to some of these, and those doubts were yet on paper, and he gave them to the surveyor to go down to the mine to inspect and report upon it, and he returned with a very satisfactory report, apparently silencing all the reports to the prejudice of the mine which had been originally made.

A Shareholder: Who was the surveyor?——The Chairman: Mr. George Henwood. He heard subsequently of extraordinary statements being made that there was no mine, that it was a myth, that your directors were trying, in company with others, to impose upon you, and since that hour his own life had been me of very considerable anxiety. He had only been associated with companies ance september last, and this was one of the earliest. He should be the last to try and draw anyone into a concern that was objectionable. He believed further that with a little confidence, and a little desire to meet the difficulties of the present moment, such arrangements could now be made with the vendors as would enable them to go on with this mine successfully. This mine had been his constant thought by day and his dream by night. To be associated with persons accused of fraud was to him a most cruel burden. He knew the

would not alter the consideration, for the property might still be worth 65,002. Mr. Snell went on to ask whether the chairman and his colleagues took the statements of the vendor generally without enquiry. The CHAIRMAN in reply said that he did not hunke the complete enquiry which the circumstances called for. He believed the vendor was honest, but he did not know that gentleman before. He did not know that the payment for the 40,000 shares said to have been subscribed had been made by Charles Morgan with one hand whilst he received it back with the other.

Mr. Syrll: You took the statements of Mr. Reynolds without evidence?
The CHAIRMAN: I must own I did. The Chairman went on to say that he made enquiries as to 2,000,000. worth of ore being in the mine. Those who were representing the vendors told him this and other statements could be verified. They did not tell him that these mines had been stopped after having ruined the shareholders in them. There was a guarantee from the vendors, but some delay took place in signing it. It was a fact the statement about the Great North Polgooth, and there was a contract. He did not remember whether Mr. Reynolds was the purchaser. He didhot know where the applications said to have been made for 30,000 shares where to be found. He understood that a syndicate had been formed to take up the new company, Mr. Turner was appointed the solicitor before the board came into into office by, he understood, a meeting of the shareholders. (A Voice: A meeting be fore allotment.) The 201 guineas paid to the lawyers was for work done.

Mr. Syell: How many shares did you apply for?—The CHAIRMAN said he took no shares. There was an ocondition that he should. (Laughter.) Sir Wn. CROSDIE (director): I took no shares. (Laughter.)

The CHAIRMAN said there was more than capital required in a speculation of this kind-industry, attention, and saill, and these he wished to give the company.

A BILABERIOLDER Observed that these qualities had been every well exemplified

company.

A SHAREHOLDER observed that these qualities had been veey well exemplified either by the Chairman or his colleagues.

Mr. SNELL went on to enquire why the directors allotted on a subscription of \$25,000t\$, when they knew they had to pay the vendor \$5,000t\$. before they could get possession of the property?——The CHAIRMAN said with the prospects held out it was deemed expedient to allot. They were to get possession of the property, and pay the balance as the money came in. They allotted as the applications were made. If the public knew that the vendor was to receive a profit of \$3,000t,, he thought it might have influenced those who subscribed. He was not aware that two of those who reported on the mine had been dead years ago. Capt. Fortescue was removed from office before he joined the company. He did not enquire why particularly, but was told it was by the sanction of the shareholders.

not enquire why particularly, but was told it was by the sanction of the shareholders.

A BHAREHOLDER enquired at what stage the directors took matters into their own hands? Was it not the directors who sent out the prospectus? Did they not put their names on the prospectus, and if any material alteration was made was it not their duty to have issued a fresh prospectus?—The CHAIRMAN said that the Articles were so bad that they had no power.

Mr. SEELL said they could have refused to pay money, and gone to the Court and applied for powers to stop this swindle. He hoped that this was not the common idea in the City of London of the way in which business should be done. A SHAIRMAN ENTROLER: The cause of their indifference is clear. They had no share and no pecuniary interest in the matter except as regards their fees.

The CHAIRMAN went on, in reply to Mr. Snell, to say that they ascertained that there was water-power from Mr. James, the surveyor. There was awritten undertaken given that the property would be handed over. He was aware that on March 21 there had been 5000!, paid. A cash-book was kept, but he did not know that there were only six items in it, one being Charles Morgan 4000! on the credit side and Charles Morgan 4000! on the debt side. The Chairman was to have two guineas a meeting, and the other directors one guinea, and Sir W. Crosbie 30s. for travelling expenses. Mr. Hunter Stevenson was the managing director; he had 200! a year. The only director who took shares was, he beleved, Major Fortescue. He could not tell how much money Mr. Reynolds had had seen Mr. Reynolds had had seen Mr. Reynolds had was seen the managing director; he had 300! A press. Mr. Anderson, who was always represented by some one else.

Mr. Skell- What have you done to protect the interest of the sharcholders.

ome one else.

Mr. Skell- What have you done to protect the interest of the shareholders dince your eyes were opened?—The Charrman said he had resigned, and offered o assist Mr. Snell in his proceedings. He also stated that Mr. Turner was so associated with Mr. Reynolds that he ought not to represent the company.

Mr. Skell said that 16,000% had been received from the shareholders, and \$5,000% had been paid. Were they aware that Mr. Reynolds had sued the company for 2000% for shertising?

sociated with Mr. Reynolds that he ought not to represent the company.
Mr. SNELL and that 18,00%, had been received from the shareholders, and
15,00% had been paid. Were they aware that Mr. Reynolds had sued the company for 290% for sdvertising?
The Chairman said he never knew of these proceedings until a judgment was
obtained against the company. He was the Chairman of five other companies.
He could not tell how much money was left in the bank.
Mr. SNELL: Perhaps Sir William Crosbie can tell?——Sir W. CROSBIE: Upen
my word I do not know. (Laughter.)
Mr. SNELL: Are you still a director?——Sir W. CROSBIE: I resigned when Mr.
Wild did, but not by letter. I mentioned it to the managing director.
Mr. HAYWAED said that such a resignation was of no effect, and he must be
held responsible.

held responsible.

Mr. Syell: We will hold the whole lot responsible, (Cheers.) No person has a right to allow his name to go forth in a prospectus unless he has taken pains to ascertain its boan fides. Mr. Wild, Major Fortescue, Sir William Crosble, and Xuthall allowed their names to be put upon the prospectus, as re ands which probably not more than the first three lines were true. As for Mr. Wild, he had only himself to blame for being deceived, and the shareholders had to blame him for being the means of deceiving them. Mr. Snell then went on to quote the language used towards the cumpany by the Master of the Rolls.

Mr. James gave his opinion as to the great value of the mine, but said that

he held no shares. It was not an arm of the Fall that ran through the property but a tributary. He could not tell whether there were 2,000,000. worth of ore there or not, but he believed the property to be valuable. It was three or four miles from the original Polgooth, and, in fact, was the old Godolphin Mine, and had not been worked for nine or ten years. There were some I4 men now engaged in preliminary operations, and the shaft was down 35 fms. There was plenty of water. He could not remember when he was appointed manager. He did not know Capt. Portescue, but received a letter from him dated from some hotel in London. He thought that 3000ℓ. or 4000ℓ. would be sufficient to develope the mine.

Mr. TURNER, the solicitor of the company, here entered the room, and in reply to Mr. Skell, said the proceedings in Court had terminated in an order to wind up. Mr. Turner went on to warn the shareholders not to throw their property into liquidation. He also went on to show that various statements made about the company were untrue. He urged the shareholders not to show themselves to get into the hands of the "wreckers," or they would never see a 6d. of the money they had subscribed. The directors had fled from the ship instead of standing by it.

After a conversation merging sometimes into extremely personal remarks, Mr. Condingler, of Nantwich, proposed, and Mr. JOHN PITE seconded, "That in the opinion of this meeting it is desirable the liquidation should be in the inands of the shareholders may vote to them."

The recolution was carried unanimously.

Mr. Skell proposed a vote of thanks to the Chairman. (A laugh). He had given what information he possessed, but unfortunately it was very meagre.—Mr. Cooks seconded the motion, and said that if the Chairman had exercised business discretion at first there would have been no occasion for these unpleasant proceedings to-day.

The meeting, which had lasted nearly three hours, then closed.

WEST AFRICAN GOLD MINES

WEST AFRICAN GOLD MINES.

The annual general meeting of the Effuenta Gold Mines Company was held on July 7 at the Guildhall Tavern. There was a good attendance of large shareholders. The report, to which we referred in our last, gave great satisfaction. The retiring directors and auditors were re-elected. The meeting then became an extraordinary general meeting according to notice, when the creation of an additional 2000 shares of 51, each, to be issued as preference shares, with power to convert into ordinary shares, was approved. The directors stated their intention of issuing at present only 1000 of these shares, every existing shareholder to be entitled to receive on application an amount of these proportionate to his present holding. This was confirmed at another extraordinary general meeting, held at the company's office on July 21, when the period during which applications would be received was extended to Aug. 5. The number of shares then applied for was more than double the amount to be issued. Advices have since been received from the mine up to June 28, at which date the manager expressed his confidence that stamping would commence during this present month of August, and that the quality of the ore was such that very satisfactory results would be obtained. The galleries opened on the tode were being extended, and the ore continued to be of the same good quality. Everything seems to presage for this mine a very prospersor future.

The GOLD COAST MINING COMPANY.—Later advices, received soon after the publication of our last munth's number met the metal and the company.

the quality of the one was such that very satisfactory results would be obtained. The galleries opened on the lode were being extented, and the one continued to be of the same good quality. Everything seems to presage for this mine a very prosperous future.

The GOLD COAST MINING COMPANY.—Later advices, received soon after the publication of our last month's number, gave the gratifying intelligence that the lode had been cut in the north tunnel, and that the ore was of even richer quality than in the shaft, assays, from bulk samples of which, made here by Messrs. Johnson and Co., showed 4½ cos. to 8 cos. of gold per ton of ore. This bulk sample was from the top of the lode 17 ft. only from the surface, the lode being there about 23 in. wide. A report from the mine, received by the company on the 2nd inst., states that the same lode, now cut in the tunnel (which is 120 ft. below the shaft extraction), has been opened throughout from hanging-wall to footwall; the breadth of this rich auriferous lode being there 28 ft., the whole of which, with the exception of about 1 ft., being of equal or richer quality than that in the shaft. The ore in the tunnel is also of even softer character than that sent home from the shaft, so much softer that the samples which have now arrived were all extracted by the pick without blasting. The report goes on to state that by the middle of September there will be ready at surface some 600 tons of this extremely rich ore. This mine, therefore, promises to be one of those extraordinary suce sees which have from time to time so gratifying to shareholders. The company are arranging the necessary machinery for stamping this ore, and bringing the proceeds to market. It seems difficult to estimate the quantity that may be rapidly extracted from this rich lode, 23 ft. in breadth, and extending over many hundred fathoms. The portion cut in the shaft the quantity that may be rapidly extracted from this rich lode, 23 ft. in breadth, and extending over many hundred fathoms. The portion cut in th

CENTRAL JAGERSFONTEIN DIAMOND MINING COMPANY

The statutory general meeting of shareholders was held at the City Terminus Hotel, Cannon-street, on Wednesday.

Mr. J. MARMONT in the chair

The SECRETARY read the notice convening the meeting

The CHARMAN said: Gentlemen, the object of this meeting, which is the statutory one, is merely a formal one, convened in conformity with the Companies Act; but I will take the opportunity of informing you, as it is the first time that I have had the pleasure of meeting you, that the allotment of shares—15,657 shares, equal to 78,2851.—have now all been taken up, and the amount due on the calls at the present moment is 25751.

you, that the allothem of shares—10,001 shares, equal to 13,252.— have now all been taken up, and the amount due on the calls at the present moment is 2575.

A SHAREHOLDER: Were the whole of the shares allotted?——The CHAIRMAN; Yes, the whole of them, and I shall tell you by and bye about the quotation, which will be obtained when the alterations which you are going to be asked to consent to have been made. We have received a telegram from our agent, Mr. Graham, a solicitor, and a gentleman of very high standing at Kimberley. He was recommended to us by the African Bank, and is acting as our trustee. His telegram has been to the effect that the property has been properly and legally transferred from the vendors to him as trustee for the company, and that our title is a thoroughly good one. I may now state that the irst payment to the vendors has been made of 40,000. There still remains owing to them 64,000. to complete the agreement, of which 27,285. Is in cash and 36,715. In shares; of this sum 14,000. will be retained until the machinery is properly put up and in working order.

Mr. KENNEDY: Has the machinery gone out yet?——The CHAIRMAN: Yes. We expect it will be all fixed and in working order on the 15th of this month. I should then also inform you that we have employed a gentleman named Mr. Wood as manager. He is on the way now, and should arrive about the middle of the month. We have been at a great deal of trouble with regard to his references. We saw him several times, and I think he will prove to be a very satisfactory manager. He will send us a report as soon as he gets there, and is able to look into it. That will be an independent report, and that we shall take the opportunity of conveying it to you. I do not think there is any other point that I have to mention, but if there are any questions you would like to ask I should be very happy to answer them.

A Shareholder: I suppose you feel satisfied about the property you have bought and sofrth?——The CHAIRMAN: Yes at present; but we have had no op-

I have to mention, but it there are any questions you would not be very happy to answer them.

A SHAREHOLDER: I suppose you feel satisfied about the property you have bought and so forth?—The CHAIRMAN: Yes at present; but we have had no opportunity of testing it. We have this advantage that we have two gentlemen on the board or who will come on the board as soon as the purchase is completed—Mr. Littlenfeld and Mr. King (Mr. Friedlander's partner), who has had a great the property of the property of the man of yery the property of the property of the man of yery the property of the pr deal of experience in diamond mining. There is a report great experience at Kimberley—Mr. Jones—but I do not the a report from a man we know nothing cf. I don't know w

Mr. KENNEDY: How did he come to the vendors, who will be one of the vendors and the vendors an preclications, and so forth.

Mr. KENNEDY: At present we have no settlement on the Stock Exchange, I believe?—The CHAIRMAN: No; but as soon as the alterations in the Articles of Association are made we are promised a quotation. We can have a settlement when the committee have passed out papers which are now before them, but not a quotation until the Articles of Association are altered.

Mr. KENNEDY: I take it that the shares are now fully paid up?—The CHAIRMAN: Yes; 5£ per share.

The CHAIRMAN moved the following resolutions:—(1.) "That Article 34 of the meeting shortly afterwards broke up.

Articles of Association of the company be altered by the substitution thereing the word 'six' for the word 'three.'" (2.) "That Article 60 of the said Article of Association be altered by omitting therefrom the sentence beginning with the words' the Chairman may also adjourn any meeting, and ending at the end of the same Article." (3.) "That Article 14 of the said Articles of Association be altered by omitting therefrom the words' and dividends unclaimed for two years after having been declared may be forfeited by the board for the benefit of the company." —Mr. KENNEDY seconded the resolutions which were carried. On the motion of Mr. KENNEDY, seconded by Mr. T. Monk, a vote of thank was passed to the Chairman, and the meeting then closed.

THE CARDIFF AND SWANSEA SMOKELESS STEAM COAL COMPANY.

COAL COMPANY.

The eighth annual meeting of shareholders was held on July 29 at the City Terminus Hotel,—Mr. P. P. Mosley in the chair.

The CHAIRMAN said that since the last meeting of shareholder the coal trade of the South Wales district had been in a better position than most other districts. With reference to the report, he had to call their attention to the working of Pentre Colliery. Notwith standing that an expenditure was being incurred in driving to the deep, all the additional cost was being charged against every ton of coal raised, whereas in some instances expenditure of this kind, and other items included in the balance-sheet, under the head of working expenses, were carried by other collieries to a capital account. The building burnt down at Pentre in October hast were now reconstructed, without any less to the company, and on a better plan than the original premises. Their agent at Cardiff, Mesers. Cory Brothers, had disposed of the output of this colliery is the same satisfactory manner as heretofore, and they had also taken over the agency for the sale of Resolven coal. With regard to Resolven, he could besteplain its present position by stating at once that the levels for which they were led to expect such satisfactory results had entirely falled. The brickworks had turned out nearly 1,000,000 bricks, and showed a satisfactory servit. The prospects of the farm for the ourrent year were much better than they were law year, the greater part of the hay crop having been satisfactorily secured, and good quality. The working of the Employers Liability Act had had the series consideration of the board, and they hoped to arrange the matter satisfactorily so as a return of income-tax, amounting to 452.7. 7s. 6d., had been recevered from the Source of the series consideration of the board, and they hoped to arrange the matter satisfactorily so as a return of income-tax, amounting to 452.7. 7s. 6d., had been recevered from the Source of the secretary.

the Board of Infant Revenue mainly owing to the great exercises of all languages the secretary.

The CHAIRMAN then moved the adoption of the report and accounts.—It. ROBERT WALLER seconded the motion.

A discussion ensued principally with reference to the legal proceedings peading against the vendors to the company, in which remarks were offered by Colond J. D. Shakespear, Mr. Russell Evans, Mr. Bland, Mr. Waite, Mr. Lowis William, Mr. Bradshaw, and one or two other shareholders. At the close of the discussion the report and accounts were adopted.

The retiring directors, Messrs, Walker and Mosley, and the auditors, Mess. Cooper Brothers and Co., were re-elected, and the meeting then closed with the small exampliment.

WEST KITTY MINE COMPANY.

In accordance with our intimation we report the speeches which vere made at the luncheon on the important occasion of the meeting of shareholders in this company :

After luncheon, the usual loyal toasts having been disposed of, the Chairman, in proposing "Success to West Kitty," said I think you will agree with me when I say that this mine will be second to now in this district. (Cheers.) We have issued reports of the most mode rate character, and shall continue to do so, and remembering that will agree with me when I say that this mine will be second to not in this district. (Cheers.) We have issued reports of the most mothate character, and shall continue to do so, and remembering that am addressing a large number of intelligent and practical miners, I encourage the belief that this practice will meet with your unanimous approval. You, at any rate, would deprecate this property being worked for market purposes, and we who are responsible for the magnement of affairs have always resolved if possible to lay out the grey perty so as to make it a permanent dividend-paying mine. (Cheers, It gives me personally unqualified satisfaction to meet the local shareholders, and I am very sorry that I shall not be able to avail myself of this pleasure more than once a year. I know of no more convenient time for holding the meetings in Cornwall than the month of July. (Hear, hear.) The financial safety of the mine is secured by the system which we adopt—the no credit system; but this involves not only the prompt payment of all obligations due by the company, but also the prompt payment of all almounts due to the company. (Laughter but is involves not only the prompt payment of all obligations due by the company but also the prompt payment of all almounts due to the company. (Laughter but is moverable). I may fall to know by those cheers that you are in no way depleased with us for getting you to pay up your calls with such usual promptisted. (Laughter.) The pleasure of receiving such prompt payments mais me sympathise with the pang of disappointment which has been experienced day by one or two large and influential shareholders, who find it impossible us to indulge in the usual luxury of a call. (Loud laughter.) You must a cause me of flattery, however, when I say that a more honourable or strighforward set of adventurers than those who are working Weet Kitty I never have your productly have not proved the mothed when he have burned them the better. At the present momental many life. (Hear, hear.) I have indicat

Peevor celebrity," who was much interested in the progress of West Kitty, as who was an efficient Officer.

Mr. MICHELL, in that king the shareholders, said the truth was that them ground was of an exceedingly rich description. This accounted for the satisficatory sales. The produce was exceptionally high. In fact, these discoveries we extremely important and gratifying. He went much into detail to prove the accuracy of his views. (A-plause.)

"The Health and Prosperity of the Shareholders" was next proposed, and the Rev. Mr. COUZENS was called upon to respond. He said he gladly responded as behalf of the slareholders who certainly were very fortunate in having discoveries uch a rich mine. Success was all the more pleasing when the management in that instance was entirely satisfactory in every department. He management he local as well as in the London management. He was happy on behalf of the shareholders to return thanks. (Cheers.)

The CHARMAN next alluded to the presence amongst them of a gentlem who had been associated with the mine as shareholder for very many years who was now the senior member of the committee. They were all delighted see Mr. Alderman Bowman at the table, and would join him in giving expression to their wishes for his continued good health.

Mr. Bowmax said he was very pleased because they had such a rich miss.

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WATSON BROTHERS' MINING CIRCULAR.

WATSON BROTHERS,

MINEOWNERS, STOCK AND SHARE DEALERS, &c 1, ST MICHAEL'S ALLEY, CORNHILL, LONDON.

Nearly twenty years ago the weekly information which had pre-viously been published for a great number of years in WATSON BROTHERS Mining Circular was transferred to the columns of the Mining Journal, with the following announcement.

Mining Journal, with the following announcement.

In the year 1843, when mining was almost unknown to the general public attention was first called to its advantages, when properly conducted, in the attention was first called to its advantages, when properly conducted, in the "Compendium of British Mining," commenced in 1837, and published in 1843, by Mr. WATSON, F.G.S., author of "Gleanings among Mines and Miners," by Mr. WATSON, F.G.S., author of "Gleanings among Mines and Miners," Notes "(second series, 1862), "The Progress of Mining," with Statistics of the Mining Interest, published annually in the Mining Journal for 21 years, &c., &c. in the Compendium, published in 1843, Mr. WATSON was the first to recomine the system of a "division of small risks in several mines, ensuring the success in the aggregate," and Messrs. WATSON BROTHERS have always a selected list on hand. Perhaps at no former period in the annals of mining has there had shared-caling than there is at present; and from the lengthened experience and situred-caling than there is at present; and from the lengthened experience of Messrs. WATSON BROTHERS have always as deceted with mines and mining, Messrs. WATSON BROTHERS are daily asked their opinion of particular mines, as well as to recommend mines to invest or speculate in, and they give their advice and recommend mines to the best of their judgment and ability, founded on the best practical advice they can obtain from the mining districts, but they will not be held responsible, nor subject to blame, if results do not always equal the expectations they may have held out in a property so fluctuating as mining.

ining, ining, in extension of mining business, the difficulty so often complained of great extension of mining business, the difficulty so often complained of buntry shareholders in getting accurate and disinterested information as to state of Cornish and Foreign Mines, and of the mancial and real position of ng companies generally, have induced Messrs, WATSON BROTHERS to make Circular now published in the Mining Journal more extensively known, and

mining companies g. actions). The their direction now published in the Mining Journal more extensively known, and to state—
That they issue daily to elients and others who apply for it a Price List (as supplied to most of the London and country papers), giving the closing prices of Mining Shares up to Four o'clock.

They also buy and sell shares for immediate cash, for the usual fortnightly settlement in all Mines dealt in on the Mining and Stock Exchanges, at the close market prices of the day, free of all charge for commission. They deal also, on the same terms, in the Public Funds, Railways, Telegraphs, and all other Securities dealt in on the Stock Exchange.

Having agents in all the mining districts, they are constantly getting mines inspected for their own guidance, and will also obtain special reports of any particular mine for their clients, for the inspecting agent's fee of £2 2s. Messrs. WATSON BROTHERS take this opportunity of stating that on July 1 they took into partnership Mr. H. J. DEAN, who has been for a number of years associated with the firm, and Mr. W. H. H. WATSON, who has had some years experience of practical mining and engineering in Cornwall, and is the son of the senior partner. The firm will still be called that of "Watson Brothers."

The number of weekly communications received from funost every part of the world in regard to remarks in this Circular indicate so plainly how much they are read (and, we trust, appreciated) that they will be continued by the sune writer.

which

he spoke in

er. while new blood is introduced to attend to the more laborious and al details of the business, the old will have more time to devote to

Let us see what some of the Cornish mines have done under the much abused Cost-book system. Tresavean, the oldest mine we can remember, with an original outlay on the part of the shareholders of about 1000l., paid them 800,000l. profit. Dolcoath has returned over 2,000,000l, and made a profit of nearly 1,000,000l. Cook's Kitchen has returned over 2,000,000l. Coming down to more modern mines, West Seton, brought out on the Cost-book system, paid in a few years 115,000l, in dividends on an outlay of 19,000l. Carn Brea has paid over 300,000l, profit. South Frances since 1846, and upon an original outlay of 18l. 18s. 9d. per share (496ths) has paid over 200,000l. in dividends. West Basset in six years, from 1854, paid 126,000l. in dividends. A few years ago South Caradon shares (64ths) were offered at 5l. each, and in 12 months rose to 2000l. each. The mine has since paid over 200,000l. in dividends. West Caradon, started soon after, paid nearly 150,000l. in dividends on a very small outlay. In East Caradon we bought shares for our clients at 1s. 6d. each, and they soon after rose to 50l. each, and paid large dividends. West In East Caradon we bought shares for our clients at 1s. 6d. each, and they soon after rose to 50l. each, and paid large dividends. West Buller from a very small outlay paid over 200,000l. profit in a few years. In one year—1854—it paid 53,760l. in dividends, and there were only 256 shares. South Wheal Basset, in 250 shares, paid from 1850 to 1863 over 330,000l. in dividends. East Rose, on an outlay of 50l, per share, paid enormous dividends. West Chiverton was purchased for 30,000l. in 1863, and paid over 160,000l. in dividends. Before Devon Consols was made into a limited company; it was in 1024 shares, on which the shareholders paid 1l. each. These shares rose to 800l. each, and the mine paid over 1,000,000l. sterling in dividends. It has not done much as a limited company. We might dividends. It has not done much as a limited company. We might go on multiplying cases where mines brought out on the Cost-Book system have paid many millions of profit to shareholders who went n and shared alike. This cannot be said of many Limited Liability companies, where the lion's share of capital goes to vendors and promoters, while dividends in most of them are remote.

East Blue Hills we stated last week had been inspected, and we gave some head of the report. It has since been forwarded to us n full, and the inspecting agent ends thus—"I must say, in conclusion that this is one of the best speculations that I ever saw."

The sampling at Wheal Crebor is 430 tons of ore, which is rather ore than estimated.

There is no reason whatever for the low price of Prince of Wales shares; they are far better worth 25s, each now than they were some onths ago. The agents are strongly of opinion the mine will turn ut well

If our correspondent will send us a prospectus of Wheal Fortune we will endeavour to get him the information he requires.

Some interesting figures were given at the Wheal Peevor meeting. Some interesting figures were given at the Wheal Peevor meeting. The amount which was originally called up on the Cost-book was 7l. 11s. per share. The dividends paid have been 8l. 4s. 6d. per share, or 24,675l. The dividends were paid in three years, and during the same time 5700l. were paid to the lords as dues. The tin sold altogether has realised 113,700l. At one meeting the dividend paid was as high as 1l. 12s. 6d. per share; that before the present one was 10s. per share; and the falling off now to 200l. per month profit confirms the opinion we expressed about the mine a few months ago.

At Carnaryon there are two stopes at the 90 worth 3 to 4 tons of opper ore per fathom, and there will be a sampling of 50 tons of ood ore shortly.

We have more than once expressed our opinion of many of the Indian gold mining companies, and our reasons for believing that they will never pay. It was useless, however, for us to write words of caution when the public like a flock of sheep were rushing head-long after them. It was the same in regard to the numberless new Cornish concerns started, and it seemed to us that the greater the lies the promoters told the more they succeeded; and the reaction is now setting in as it will in gold mines. low setting in, as it will in gold mines.

We have now before us the accounts of three Indian companies We have now before us the accounts of three Indian companies for working gold mines. In one, preliminary expenses are charged 1250/19s., prospecting 1001/. 7s. 10d., expenses of deputation to India 833/. 6s. 10d., salaries 5220/. 10s. 3d., law expenses in London and India 1979/. 0s. 7d., general expenses in India 4777/. 10s. 7d., general expenses in Great Britain 1169/. 0s. 3d. Let any one add up these sums charged for establishment expenses, &c., irrespective of mining, deduct them from an authorised capital of 50,000/, and he will cease to wonder that fresh capital has to be raised the will cease to wonder that fresh capital has to be raised eady. Another company charges 7563*l*. 6s. 8 l. for Indian establishment expenditure. London establishment and preliminary exditure 2481*l*. 10s. 8d. The London establishment of another costs [2*l*. 15s. 6*l*. and reach fitter 2481*l*. 10s. 8d. The condon establishment of another costs 22721. Iss. 6d. and none of them show working costs for gold or the result of any such working. A vast amount of "sack for a small piece of bread" at present.

People grumble at English mines if the office expenses are 150l. a year; but things seem to be done wholesale in India; and if great care is not taken the capital of some companies will be swallowed up without any results from mining at all.

West Crebor is now 25 fms. deep, and there has been a good lode in the shaft, almost from surface. It is intended to sink to the 30, and then drive on the lode east and west. At this depth there is a good course of ore in the Bridge lode.

Wheal Crebor next week.

PROVINCIAL STOCK AND SHARE MARKETS.

PROVINCIAL STOCK AND SHARE MARKETS.

CORNISH MINE SHARE MARKET.—Mr. S. J. DAVEY, mine shared dealer, Redruth (Aug. 4), writes:—Our market has been more octive this week than it was last, and Dolcoaths have advanced 4, South Frances 15s., Tincroft 2, West Poldice 1, and Wheal Agar 2. At Wheal Peevor meeting, on Tuesday, a 6s. dividend was declared. The following are to-day's prices:—Blue Hills, 2½ to 3; Carn Brea, 23½ to 24, ex div.; Cook's Kitchen, 6 to 6½; Mollowing are to-day's prices:—Blue Hills, 2½ to 3; Carn Brea, 23½ to 37½; Killing freth, ¾ to ½; Mellanear, 4 to 4½; New Cook's Kitchen, 6 to 6½; North Busy, ½ to ½; Penhalls, 1½ to 1½; Pecha-an-drea, 3½ to 4; South Corofty, 8 to 3½; South Frances, 14½ to 14½; Theorett, 18 to 18½; West Basset, 14½ to 15; West Perovor, 14½ to 15; West Prances, 11 to 11½; West Kitty, 5½ to 6½ west Peevor, 14½ to 15; West Prances, 10 to 11½; Wheal Reserved, 14 to 14½; Wheal Ritty (8t. Agnes), 2 to 2½; Wheal Boys, 2½ to 2½.

— Mr. J. H. RENNOLDS, stock and share broker, Redruth (Aug. 4), writes:—During the week a fair business has been done in all the leading shares, more especially Dolcoaths, which close at their best; Agars and West Poldice also in declared. Subjoined are the closing prices:—Blue Hills, 2 to 3½; Carn Brea, 23½ to 23½, ex div.; Cook's Kitchen, 16 to 16½; Dolcoath, 69 to 69½; East Pool, 37½ to 37½, Marke Valley, 1 to 1½; West Blue Hills, 2 to 3½; Penhanls, 1½ to 1½; West Blues, 1 to 1½; West Brances, 14½ to 14½; The 1 to 1½; West Brances, 14½ to 14½; Wheal Boys, 2½ to 2½; south Frances, West Basset, 14 to 14½; West Frances, 14½ to 14½; The 1 more than 1 to 1½; West Brances, 14½ to 14½; Wheal Boys, 2½ to 2½; south Frances, West Basset, 14 to 14½; Wheal Boys, 2½ to 2½; south Frances, West Basset, 14 to 14½; Wheal Boys, 2½ to 2½; south Granching quotations:—Blue Hills, 2¾ to 5½; Frances, 14½ to 14½; Wheal Boys, 2½ to 2½; south Granching quotations:—Blue Hills, 2¾ to 5½; Wheal Jagar, 16 to 16½; Wheal Jagar, and West Poldice shares have Improved in value. 10s. divid

2 to 2½; Wheal Feevor, 14½ to 15; Wheal Prussia, 1½ to 2; Wheal Uny, 1 to 1½; West Providence, 1½ to 1½; Control, 1½ to 1½; Mark Providence, 1½ to 1½; Control, 1½ to

MANCHESTER.—Messrs. Joseph R. and W. P. Baines, sharebrokers of business days has certainly been curtailed by the Bank Holiday, and though prices have in the main been strong with a fairly buoyant tone, the amount of business reported is very moderate, the holiday feeling no doubt contributing in no small degree to the pancity of dealings. Dividend announcements on the leading stocks as they are made keep disappointing, comparing badly against the results for corresponding period of last year, but the feeling of hope with regard to the future keeps prices from falling away to any great extent, even when anticipations with regard to dividends are not realised. The general markets on the whole show a favourable tendency, falthough these are separate instances where adverse change is recorded.—Banks, as was the case last week, have produced very few dealings, and the values obtained are not noteworthy. The alterations therein are in ocase other than slight. Higher: Manchester and County ½. Lower: Bank of Liverpool ½, although these are separate instances where adverse change is recorded.—Banks, as was the case last week, have produced very few dealings, and the values obtained are not noteworthy. The alterations therein are in ocase other than slight. Higher: Manchester and County ½. Lower: Bank of Liverpool ½, Consolidated Bank ½, Lancashire and Yorkshire ½.—INSURANCE have been neglected again, but where done prices show little change. With the exception of Royal (Liverpool) ½, —Coal Roya, &c., and Minno.—Though as yet the feeling has not produced much increased activity as to actual business to make the control of the market is distinctly stronger. What changes are adverse are apparently the effect of individual influences. The majority of the alterations from a control of the market is distinctly stronger. What changes are adverse are apparently the effect of individual influences. The majority of the alterations from a control of a first of the courrence of the "water and a confidence fold ½, Cabwa the discuss MANCHESTER .- Messrs. Joseph R. and W. P. Baines, sharebrokers

Manchester Carriage, A. ½; Bodega, ½; and Zoedone, ½.—Lower: Rylands and Sons, ½.
RAILWAYS.—The several dividends notified during the week have had irregular effects, but prices on an average are firmer. Great Easterns have responded to an improved traffic and show a rise of 1. Great Northern, A, are better to a like amount, on the dividend being the same as that of 12 months ago. Sheffield also record an advance of 1 on sharp buying, and Midlands, with ½ per cent. reduced division, are 1½ better. Great Western dividend at the rate of 4½ per cent. per annum was disappointing, and caused a temporary decline in these and Londons. Lancashire and Yorkshire dividend, 4½ per cent. per annum, against 5 per cent. caused the stock to fall 1½. Chathams are marked ½ down, on a depressed feeling as to their future working. South-Eastern, A, have also receded ½, without any special reason. Brighton, A, have fluctuated as usual. In Canadians the traffics of the Grand Trunk (1249), decrease) and Chicago Grand Trunk (784, decrease) caused a flatness at opening, but this market has recovered all round, and prices are sensibly stronger. Americans have been lively, especially Philadelphia and Reading, which are distinctly firmer, on the meeting to be held to-morrow, at which President Gowen is to be present. Pennsylvanias are 3155, and Oregons 87 higher, the new issues of the latter being prominently in request.

NEWCASTLE-ON-TYNE STOCK EXCHANGE.—Messrs. SPENCE and IRWIN, stock and share brokers, Grey-street (Aug. 4), write:—The month just closed has been, as usual, very quiet, owing to so many people being away on their holidays, but there being now a better tone in trade generally, and as the half-year dividends that have as yet been declared are considered favourable we think there is a reasonable prospect of a further improvement during the next few months. Several transactions have lately been effected in Bede Metal and Chemical Company's shares at par, and they are still offered a that price. Bolckow, Vaughan and Co.'s shares have been in good demand during the past week and now stand 4½ to 4½ premore 121, paid, 23½ for 201, paid, and 21½ for 5 per cent. preference shares. Consett Ispanish Ore shares are 32s. 6d. to 33s. 6d. Palmer's Shipbuilding and Iron Company's B shares are largely inquirted for at 5 dis., whilst there is a small seller at 4½ dis. A fair number of shares have recently changed hands in Skernding shares are 2½6, and preference, par to ½ prem.

Tharsis Bulphur and Copper shares have improved to 42½\$to 42½. West Cumberland Iron and Steel shares are at 11½ to 11½ dis. Crook Burn Mine share, are offered at par without tempting buyers. Dubby 8yke Mine shares a 6 s. t.

6s. Green Hurth Mine shares are 8 to 81/6. Hexham and Edmondbuyers Mine shares are 21s. to 22s. 6d. North Green Hurth Mine, 1/. paid shares, are 17/8 to 2, and 2s. 6d. paid shares are wanted at 20s. premium; at moment there are none offering. Teesdale Mine ordinary shares are offered at 5s. and preference at 6s., without tempting buyers.

SCOTCH MINING AND INDUSTRIAL COMPANIES SHARE MARKETS.

EDINBURGH.—Messrs. THOMAS MILLER and SONS, stock and share brokers, Princes-street (August 4) write:—The fluctuations in Scotch railway stocks during the past week have been within comparatively narrow limits. North British has had the chief share of attention; preference and debenture stocks continue in fair demand. A large business has been done in American shares. There have been very few transactions in property companies shares. Investment shares have been in good demand. Scottish-American mortgages have risen from 64s. to 67s. In bank stocks, Commercial has gone from 25t to 259, and National from 27s to 29o. In Insurance shares, North British Mercantile have risen from 63 to 67. In mining shares, Chardian Copper have a twaced from 25s. 61, to 27s.; Clyde Coal, from 63s, to 63s.; Tharsis, from 42/5 to 425s.

IRISH MINING AND MISCELLANEOUS COMPANIES' SHARE MARKET

DUBLIN, Aug. 4.—There has been considerably more animation in DCBLIN, AUG. 1.—There has been considerably more animation in the market for shares in mining companies than for some time past. Berehavens and Mining Company of Ireland have been very active, Berehavens being dealt in as high as 6s., but have since become dull, and receded to 5s. Mining Company of Ireland, on the other hand, have shown a steady and gradual rise, and close at $2\frac{1}{4}$. The general market is quiet.

CORK.—Messrs. J. H. CARROLL and SONS, stock and share brokers,

CORK.—Messrs. J. H. CARROLL and SONS, stock and share brokers, South Mall (Aug. 3), write: — Markets remain very quiet. Great Southerns changed hands at 111½, and Midlands at 85. Bandons were offered at 84. National Banks were done at 70, and Munsters at 7½. Hibernians also changed hands at 45½, but there was nothing done in Provincials. Cork Steam Packets are also unchanged. Lyons shares remain about 5, and gas shares 7. Gouldings are offered at 82, and Loves shares asked for at 43. Harbour Board deben. at $8\frac{1}{3}$, and Levys shares asked for at $4\frac{3}{4}$. Harbour Board debenturers are buyers $102\frac{1}{2}$ to 3 per cent.

NEW GREAT WHEAL VOR.

NEW GREAT WHEAL VOR.

July 18.—The following report has been made by Mr. George Henwood, one of the most experienced and practically scientific mining authorities of the day:—The New Great Wheal Vor grants have been undeservedly neglected, being in the neighbourhood of some of the most celebrated tin mines in Cornwall. In one of my works on tin mining, published some years since, I quoted this as being strange, thinking that so unquestionably valuable a property had been absorbed in some of the grants wrought in proximity therewith. The astute "old men" (miners) have proved the existence of the lodes, and their continuity throughout the whole extent of the grants their works attesting the fact; these, however, are only a few fathoms deep, not deep enough to be in the heart of the great in formation that there certainly is in New Great Wheal Vor. The same lodes cast and west, and parallel lodes north and south, have been worked to very great depths, and in every instance have produced large quantities of tin ore, improving in quantity and quality at their deepest points of development. There are six well-defined east and west lodes, which are about ½ mile in the grants, therefore to be considered practically inexhaustible. The mine opening out could not possibly be in a better geological position, being in the killas (clay-slate formation), superimposing the great grantite range, all the mines wrought therein having been very successful. To particularise them would be superfluous, as the plan accompanying the prospectus gives full information. The operations at accent being carried on are sinking shafts to prove the lodes, and there is already afforded the most conclusive evisence of the lodes possessing great productive power, by rocks of tin ore being brought to surface, although the workings are only a few fathoms deep. To test the quality I took average samples, and found their yield highly satisfactory. There cannot be any misgiving as regards the successor New Great Wheal Vor. Comparatively little capital will be very productive and prosperous, and in a short time will pay dividend announcements have been rather disappointing. The probabilities, however, are that the past will be ignored, and that in view of a more prosperous future values will further increase in most cases. Canadians somewhat unsettled, but the "bear" account has a steadying influence, notwithstanding poor traffic returns. Foreign stocks, especially Spanish and Turks, decidedly firm. American rails inclined to lift, but the progress is slow, except in the case of Oregons and Readings. Local stocks quiet. Hull Bauks, 12½; London and Yorkshire Banks, 32s. 6d.; Hull Trans, 9½; Earle's Shipbuilding, 20; Hull and Barnsley, 17. 56. 6d.

Newcastle-on-Tyne Stock Exchange—M.

Newcastle-on-Tyne Stock Exchange—M.

Inwin, stock and share breakers.

has been made at this mine during the present week. In the 30 level east of Miss Bennett's Shaft, which has just been commenced, a branch was found, which on assay gave 925 oz. of fine silver to the ton. This exceeds in richness the branch met with in deepening the shaft a few weeks back, and leaves no doubt that the whole of the ground now being opened as a leaves in a stable for all the shaft as the stable of the ground now being opened as a stable for all the shaft as the stable of the ground now being opened as a stable for all the shaft as the stable of the ground now being opened as a stable for all the shaft as the stable of the ground now being opened as a stable for all the stable of the ground now being opened as a stable of the stable of

shaft a few weeks back, and leaves no doubt that the whole of the ground now being opened up is rich for silver.

BEDFORD UNITED.—As McCallan's Shaft on the Bridge Lode is being sunk in a course of ore worth 30t. per fathom, and the two ends at the 20 are worth together 20t. per fathom, it is only a fair assumption that so soon as another level is reached every 10 fathoms driven east and west will open up at least 1000t. worth of copper ore, and which can probably be taken away at 10s. in 1t., includive of raising, dressing, &c., thus leaving a good profit to the shareholders. This should not be lost sight of, as there is every prospect of the continuance of a good lode, both in length and prospect of the continuance of a good lode, both in length and depth, and opinions are in favour of an improvement in quantity and quality of the ore as operations are extended, both in sinking and driving.

WILLIAM BENNETTS,



PATENT MINERS' SAFETY FUSE MANUFACTURER



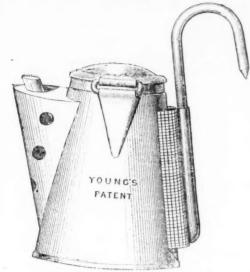
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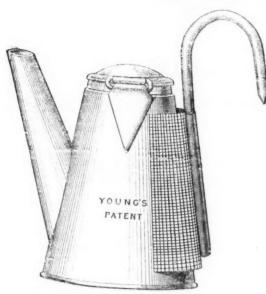
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(LIMITED)



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MINERS' LAMPS FOR BURNING SOLID PARAFFIN WAX.

YOUNG'S PARAFFIN LIGHT AND MINERAL OIL COMPANY (Limited) have pleasure in inviting attention to their recently-patented MINERS' LAMPS for BURNING SOLID PARAFFIN patented MINERS' LAMPS for BÜRNING SOLID PARAFFIN WAX, which possess great advantages over all underground lamps used either with oil or tallow. Many miners have tested them, and report in the highest terms as to the whiteness, smokelessness, safety, and great economy of their light in comparison with that obtained from other underground lamps.

AN EXPERIENCED OVERSEER ESTIMATES THE SAVING TO EACH MINER AT 3D. PER WEEK, AND SAYS THE LAMP GIVES NEARLY TWICE AS MUCH LIGHT AS WHEN ORDI-

MANUFACTURED BY YOUNG'S PARAFFIN LIGHT AND MINERAL OIL COMPANY (LIMITED),

At their CLISSOLD LAMP WORKS, BIRMINGHAM,

And supplied to the trade from their WHOLESALE BRANCHES AT ABERDEEN, BELFAST, BRISTOL, DUBLIN DUNDEE, EDINBURGH, GLASGOW, HULL, LONDON, MAN-CHESTER, NEWCASTLE-ON TYNE, AND PLYMOUTH, JOHN FYFE, General Manager.

REGISTERED OFFICE,-7, WEST GEORGE STREET, GLASGOW

MAPS OF THE MINES, AND OF UTAH TERRITORY MAPS OF THE MINES, AND OF UTAH TERRITORY

ROISETH'S NEW AND REVISED MAP FOR 1875,—
Size 40 by 56 inches, scale 8 miles to the inch. Handsomely engraved, cocured in counties, showing the Towns, Settlements, Rivers, Lakes, Railroads,
Mining Districts, &c., throughout the Territory, and all the Government Surveys
to date. Mounted on cloth, £2; half-mounted, £1 12s.; pocket form, £1.

Also, GENERAL MINING MAP OF UTAH, showing twenty-eight of the
principal Mining Districts adjacent to Salt Lake City, and location of the most
prominent mines. Price, pocket form, 8s.

Also, NEW MAP OF LITTLE AND BIG COTTONWOOD MINING DISTRICTS
showing the location of over Four Hundred Mines and Tunnel Sites, together
with the Mines Surveyed for United States Patent. Price, sheets, 6s.; pocket
form, 8s.

For sale, and supplied by—
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ESTABLISHED 1852.

SYBRY, SEARLS, COMPANY,

CELEBRATED MINING STEEL, CAST STEEL FOR TOOLS, SHEAR, BLISTER, AND SPRING STEEL,

Cast Steel Drills. Solid Steel Hammers. Steel Picks. Steel Wedges.

Saws. Files. Wagon Springs. Shovels.

Anvils. Vices. Bellows. Engineers' Tools.

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Ransome's Artificial Free-grit Grindstones,

Solid and annular, possess extraordinary cutting powers.

Imperishable "Damp Cure" for Bricks, Stone, Cement, Tiles, &c., LIFTING JACKS, CRABS, PULLEYS, BLAST FORGES, VICE BENCHES, &c. "RAPID" SELF-ACTING DRILLING MACHINES.

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Crater Furnace Cement, £7 per ton. Vulcan Steam Cement.

Mills for Steam Jointing, Paint, Mortar, and other Purposes. CATALOGUES OF ABOVE, AND OF VARIOUS OTHER TOOLS, &c, ON APPLICATION



PARIS EXHIBITION, 1878.

SALMON, BARNES, & CO., MANUFACTURERS OF THE PATENT

ROANHEAD ROCK DRILL,

ATKINSON'S PATENT



PARIS EXHIBITION, 1878.

YORK EXHIBITION, 1879 EEDWATER HEATER.

FULL PARTICULARS AND PRICES ON APPLICATION.

Canal Head Foundry and Engineering Works, Ulverston,

PERFORATORS, WIRE WEAVERS, AND GENERAL IRONMONGRS,

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Millimeter holes perforated in sheet-copper, brass, IRON, steel, and zinc.

CERTIFICATE OF MERIT Awarded by the Mining Institute of Cornwall

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JIGGER-BOTTOMS AND RUSHER SIEVES.

Manufacturers o. Stamps-Grates, Sieves, and Riddles, for Mining and other purposes, by Self-acting Steam Machinery.

ARY TALLOW IS USED, WITH NO TROUBLE IN TRIM- SPECIALITY.—Thick Copper, Brass, Zine, and IRON Perforations, Classifying-Sieves Pierced Pulveriser and Stamps-Grates up to 324 holes to the square inch, Conical hole Copper Jigger Plates and round bottom "Sifts," Spigot and Faucet Zinc Air pipes, &c.

LONDON-1862.

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ESTABLISHED 1848.

W. BRUNTON AND CO., Penhellick Safety Fuse Works, Redruth,

Cambrian Safety Fuse Works, Wrexham, MANUFACTURERS OF

ALL KINDS OF SAFETY FUSE.

SILVER MEDAL (HIGHEST AWARD), MELBOURNE EXHIBITION, 1881, for



PARIS-1878



"EXCELLENCE OF MANUFACTURE,"

JOHN SPENCER & SONS,

Newburn Steel Works, Newcastle-on-Tyne.

STEEL

CASTINGS.

WHEELS & AXLES

FITTED COMPLETE.

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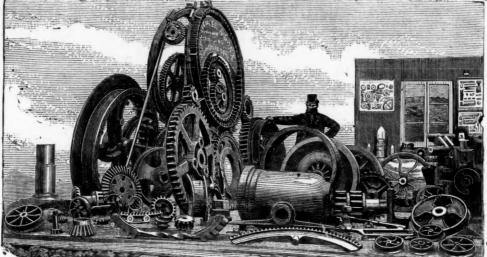
INCLINE PULLEYS AND ROLLERS.

STAMP HEADS AND

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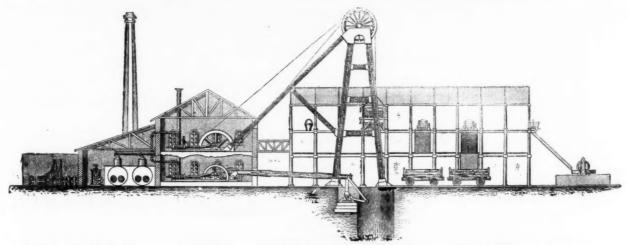


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JUMPER STEEL,
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Engineers and Contractors for every description of Plant for Collieries, Mines, and Brickworks.

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WINDING, HAULING, AND PUMPING ENGINES; AIR COMPRESSORS; DIRECT-ACTING STEAM PUMPS; VENTILATING FANS; SEMI-PORTABLE BOILERS AND ENGINES COMBINED; PIT-HEAD PULLEYS; WIRE ROPES; WROUGHT-IRON HEAD GEAR, CAGES, and SCREENS; BOILERS; PATENT DETACHING HOOKS; COAL WASHING MACHINES; STEAM HAMMERS; STEAM CAPSTANS; PUMPS; VALVES.

PATENT BRIQUETTE MACHINES (for Compressed Fuel).

MINES.

CORNISH CRUSHERS and STAMPING MILLS; WATER WHEELS; REVOLVING and OTHER SCREENS; BLAKE'S ORE CRUSHERS; JIGGERS; BUDDLES; ORE-WASHING MACHINES; GRINDING and AMALGAMATING PANS; WELL-BORING MACHINERY; WIRE TRAMWAYS.

BRICKWORKS.

PATENT BRICK MACHINES for DRY, SEMI-DRY, and PLASTIC CLAY; WET and PERFORATED CLAY GRINDING PANS; CLAY ROLLS PUG MILLS; MORTAR MILLS; FRICTION HOISTS; PIPE-MAKING MACHINES; BRICK PRESSES; PATENT KILNS.

PLANS, SPECIFICATIONS, AND ESTIMATES FOR COMPLETE PLANTS ON APPLICATION.

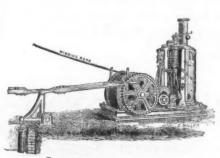
BEST DESIGNS, WORKMANSHIP, and MATERIAL THROUGHOUT.

N.B.—Experienced workmen sent out, if required, to Erect or Manage. Considerable Saving in Prices by dealing direct with us, having for many y_{ears} been chiefly engaged in the manufacture of Colliery, Mining, and Brickmaking Plants.

CHAPLINS' PATENT PORTABLE STEAM ENGINES AND BOILERS.

PRIZE MEDAL, INTERNATIONAL EXHIBITION.

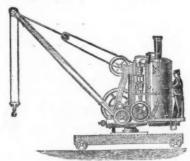
ALWAYS IN STOCK OR IN PROGRESS.



Pumping and Winding Engine.

§ to 30 horse-power. Portable or Fixed.

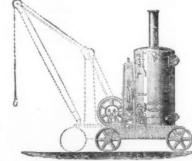
With One or Two Drums, suited for Pit Sinking, &c.



STEAM CRANE.

Portable or Fixed, 1 to 20 tons.

For Wharf or Railway.



HOISTING ENGINE.

To hoist from 10 cwt. to 15 tons direct
With or without Pillar and Jib.



CONTRACTORS' LOCOMOTIVE.

9 to 21 horse-power. For Steep Inclines and Sharp Curves
Gauge from about 2½ feet upwards.

CHAPLINS' STEAM NAVVIES, ROAD ROLLERS, DERRICK AND OVERHEAD CRANES, STATIONARY ENGINES, AND OTHER MACHINERY

ALEX. CHAPLIN AND CO., Patentees and Sole Manufacturers, CRANSTONHILL ENGINE WORKS, GLASGOW.

Sole London House: 63, Queen Victoria Street, London, E.C.

Parties are cautioned against using or purchasing imitations or infringements of these Patent Manufactures.







Paris, Grder of the Chows of Prussia. Bronze Medal, 1867.

A DIPLOMA-HIGHEST OF ALL AWARDS-given by the Geographical Congress, Paris, 1875-M. Favre, Contractor, having xhibited the McKean Drill alone as the Model Boring Machine or the ST. GOTHARD TUNNEL.

SILVE 3 MEDAL of the Highland and West of Scotland Agricultur: Society, 1875-HIGHEST AWARD.

At .he south end of the St. Gothard Tunnel, where

Are exclusively used, the advance made during eight consecutive weeks, ending February 7, was 24.90, 27.60, 24.80, 26.10 28.30, 27.10, 28.40, 28.70 metres. Total advance of south head ing during January was 121.30 metres, or 133 yards.

In a series of comparative trials made at the St. Gothard Tunnel, the McKean Rock Drill continued to work until the pres-Fure was reduced to one-half atmosphere (7 lbs.), showing almost the entire motive force to be available for the blow against the rock—a result of itself indicating many advantages.

The GREAT WESTERN RAJLWAY has adopted these Machines for the SEVERN TUNNEL; the LONDON AND NORTH-WESTERN RAILWAY for the FESTINIOG TUN. NEL: and the BRITISH GOVERNMENT for several Public Works. A considerable number of Mining Companies are now using them. Shafts and Galleries are driven at from three to six times the speed of hand labour, according to the size and number of machines employed, and with important saving in cost. The ratio of advantage over hand labour is greatest a cere the rock is hardest.

hese Machines possess many advantages, which give them value unapproached by any other system of Boring Machine.

THE MCKEAN ROCK DRILL IS ATTAINING GENERAL JSE THROUGHOUT THE WORLD FOR MINING, TUN-NELLING, QUARRYING, AND SUB-MARINE BORING.

"he McKEAN ROCK DRILLS are the most powerful-the wost portable-the most durable-the most compact-of the best mechanical device. They contain the fewest parts-bave no weak parts-act without shock upon any of the operating parts-work with a ower pressure than any other Rock Drill-may be worked at a higher pressure than any other -may be run with safety to FIFTEEN HUNDRED STROKES PER MINUTE-do not require a mechanic to work them-are the smallest, shortest, and lightest of all machines-will give the longest feed without change of tool-work with long or short stroke at pleasure of operator.

The BAME Machine may be used for sinking, drifting, or open work. Their working parts are best protected against and accidents. The various methods of mounting them are the most efficient.

N.B.-Correspondents should state particulars as to character of work in hand in writing us for information, on receipt of which a special definite answer, with reference to our full illustrated catalogue, will be sent.

PORTABLE BOILERS, AIR COMPRESSORS, BORING STEEL, IRON, AND FLEXIBLE TUBING.

The McKean Drill may be seen in operation daily in London.

McKEAN AND CO. ENGINEERS

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MANUFACTURED FOR MCKEAN AND CO. BY
MESSES P. AND W MACLELLAN, "CLUTHA IRONWORKS
GLASGOW.



By a special method of preparation this leather is made solid, perfectly close in texture—and impermeable to water; it has, therefore, all tae qualifications essential for pump buckets, and is the most durable material of which they can be made. It may be had of all dealers in leather, and of—

HEPBURN AND GALE,

TANNERS AND CURRIERS, LEATHER MILL BAND AND HOSE PIPE MANUF LONG LANE, SOUTHWARK LONDON
Prize Medals, 1851, 1855, 1878, for
MILL BANDS, HOSE, AND LEATHER FOR MACHINERY PURPOSES.

PARE UNDERSIGNED, having secured the Grants of several VALUABLE MINERAL PROPERTIES (TIN AND COPPER), in the St. Blazey District, in the vicinity of Fowey Consols, &c., is DESIROUS of OITAINING the CO-OPERATION of CAPITALISTS for their EXPLORATION. Tiere is little or no risk involved in the undertakings, and the capital require in the control of CAPITALISTS of the Capital Regulary in the reach case is very limited. 11, Parade, Truro, 3rd February, 1881.

AP OF CALLINGTON, CALSTOCK, AND TAVISTOC
Proposed to be published by subscription, a MAP of the ABOVE DISTRICTS,
showing the names and boundaries of all existing setts, lodes, cross-courses, and
every other matter which such a map should contain. Persons disposed to
patronise the publication—at One Guinea per copy—will please send their names
as early as possible to me.
R. SYMONS, Mineral Surveyor, Truro.
February 3rd 1881.

TO PARENTS AND GUARDIANS.

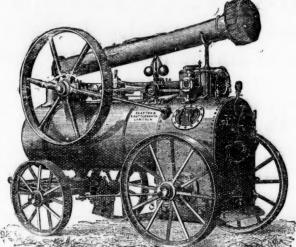
AN ELIGIBLE OPPORTUNITY is now offered for the SETTLEMENT of an ACTIVE YOUNG GENTLEMAN IN CANADA. He will be enabled to obtain his profession as a Solicitor in five, or if he be a fraduate in three years. Cost of living about \$2150. In the meantime ne will have active work, and \$\varphi\$ aim a knowledge of the Dominion, which is destined to become one of the 'sost prosperous of the Colonies. Premium, \$2100 sterling. HERBERT C. JONES,

32, Wellington-street, Toronto.

1880-81.-MELBOURNE (AUSTRALIA) EXHIBITION

Portable Engine—Gold Medal.

Thrashing Machine—Gold Medal.



THRASHING MACHINES.

GRINDING MILLS.

The Royal Agricultural Society of England have awarded Every First Prize to CLAYTON and SHUTTLEWORTH for Portable and other Steam Engines since 1863, and Pri at every Meeting at which they have competed since 1849,

GOLD MEDALS, AND OTHER PRIZES.

Have been awarded to CLAYTON AND SHUTTLEWORTH at the various International Exhibitions of all Nations, including LONDON, 1851, 1862; PARIS, 1855, 1867, 1878; VIENN 1857, 1866, 1873; for their

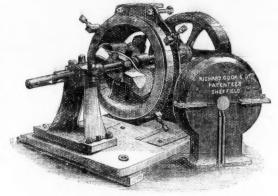
STEAM ENGINES, Portable and Fixed (For Coals, Wood, Straw, and every description of

TRACTION ENGINES, &c.

Catalogues in English and in all Continental Languages free on application.

CLAYTON AND SHUTTLEWORTH, STAMP END WORKS, LINCOLN, & 78, LOMBARD STREET, LONDON.

LUCOPS' Patent Centrifugal Pulveriser,



(Two tons per hour with 5 horse-power actual,)

For reducing to an impalpable powder, or to any requisite degree of fineness, all materials capable of being thus treated. CEMENT. CHEMICALS, GRAIN, COAL, COLOURS, PHOSPHATES, LIME, COPPER, TIN, ZINC, and other Ores with rapidity, completeness, and perfect uniformity.

THE ONLY GUARANTEED MACHINE FOR

QUARTZ. GOLD

This mill consists of a circular iron casing, the section being elliptical in form, and is fixed vertically on a firm bed or foundation plate, a shaft runs through the centre of the casing on which is keyed a series of arms, in the extremities of which revolve two or more slightly oblong iron rollers, which, when put in motion, fly off from the centre and run upon the interior periphery of the casing, and by centrifugal force crush and pulverise the article under treatment.

The effect produced by this system is most extraordinary in its practical results, the power required is small in consequence of the comparative absence of friction from the working parts of the mill, the combined results of the rolling action of the crushes and their impact by centrifugal force on the material, being the same in kind, but in degree far exceeding that of edge runners, the sides of the casing are formed as open wire sieves of the degree of fineness required, and a series of propelling blades attached and revolving with the central shaft drive the material under treatment through the sieves as it is pulverised; by this arrangement the degree of fineness can with certainty be arrived at from coarse to extreme fine, and that with uniformity.

Intending purchasers can at all times satisfy themselves by sending the material they wish to operate on, and seeing it pulversed. Over 300 in use. Prices and testimonials free on application.

RICHARD COOK & CO., ENGINEERS, SHEFFIELD.

SAX'S ELECTRIC SIGNAL BELLS



AND OTHER TELEGRAPHIC APPARATUS FOR MINES, &c.

Prize Medal - - - London, 1862. Sydney, 1879. First Prize

Prize Medal - - - Melbourne, 1881. PRICE LIST POST FREE, ON APPLICATION.

JULIUS SAX (ESTD. 1850), 108, GREAT RUSSELL STREET, LONDON, W

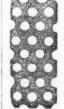
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NEAR VICTORIA STATION, MANCHESTER. (ESTABLISHED 1790).

JOHN STANIAR AND CO.. Manufacturers by STEAM POWER of all kinds of Wire Web, EXTRA TREBLE STRONG for LEAD AND COPPER MINES.

Jigger Bottoms and Cylinder Covers woven ANY WIDTH, in Iron, Steel, Brass, or Copper FXTRA STRONG PERFORATED ZINC AND COPPER RIDDLES AND SIEVES

Shipping Orders Executed with the Greatest Dispatch,



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GOLD AND SILVER MEDALS AWARDED for Steam-Engines & Boilers, also the Special Steam Pump, and Compound Pumping Engine.



TANGYE BROTHERS AND HOLMAN,

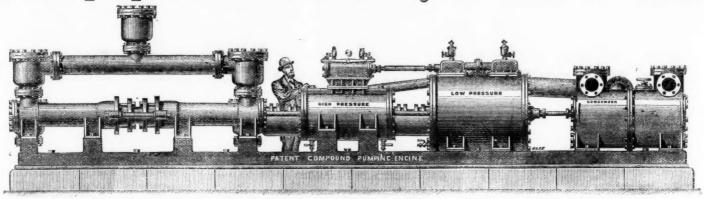
CORNWALL HOUSE, 35, QUEEN VICTORIA STREET, LONDON, and BIRMINGHAM, (TANGYE BROTHERS), CORNWALL WORKS, SOHO.

TANGYE'S DIRECT-ACTING

COMPOUND PUMPING ENGINE,

For use in Mines, Water Works, Sewage Works,

And all purposes where Economy of Fuel is essential,



TANGYE'S DIRECT-ACTING COMPOUND PUMPING ENGINE, WITH AIR-PUMP CONDENSER.

TANGYE'S COMPOUND PUMPING ENGINE COMBINES SIMPLICITY, CERTAINTY OF ACTION, GREAT ECONOMY IN WORKING, COMPACTNESS, AND MODERATE FIRST COST.

This Engine will be found the most simple and economical appliance for Mine Draining, Town Water Supply, and Genera' Purposes of Pumping ever introduced, and as regards Mine Draining, the first cost is very moderate compared with the method of raising water from great depths by a series of 40 or 50 fm. lifts. No costly engine-houses or massive foundations, no repetition of plunger lifts, ponderous connecting rods, or complication of pitwork, are required, while they allow a clear shaft for hauling purposes. In this Engine the economical advantages resulting from the expansion and condensation of steam are very simply and effectively obtained. The steam after leaving the high-pressure cylinder is received into and expanded in the low-pressure cylinder, and is thus used twice over before being exhausted into the condenser or atmosphere.

The following first-class Testimonials will bear evidence as to the efficiency and economy of the Engine:—

TESTIMONIALS OF TANGYE'S COMPOUND PUMPING ENGINE

Newcastle and Gateshead Water Company, Newcastle-on-Tyne, Oct. 20, 1879 36 × 10" × 48" COMPOUND CONDENSING STEAM PUMPING ENGINE.

Messrs. Tangye Brothers.

Messrs. Tangye Brothers.

Messrs. Tangye Brothers.

Gentlemen,—In reply to your enquiry as to the efficiency of the two pairs o Compound Condensing Engines recently erected by you for this company at our Gateshead Pumping Station, I have great pleasure in informing you that they have far surpassed my expectations, being capable of pumping 50 per cent. more water than the quantity contracted for; and by a series of experiments I find they work as economically as any other engine of the compound type, and will compare favourably with any other class of pumping engine. By the simplicity of their arrangement and superior workmanship they require very little attendance and repairs, and the pumps are quite noiseless. A short time ago I had then tried upon air by suddenly shutting off the column, and found they did not run away, thus showing the perfect controlling or governing power of the Floyd's Improved Steam-moved Reversing Vale. I will thank you to forward the other two pairs you have in hand for our Benwell Pumping Station.

(Signed)

SIZES AND

The Chesterfield and Boythorpe Colliery Company (Limited) Registered Office, Boythorpe, near Chesterfield, Oct. 1, 1879

Registered Office, Boythorpe, near Chesterfield, Oct. 1, 1879.

36 × 12" × 48" DOUBLE RAM COMPOUND CONDENSING STEAM PUMPING ENGINES

Messrs. Tangye Brothers. Supplied in January, 1878.

GENTLEMEN,—Referring to the above, which we have now had working continuously night and day for the last 12 months, we are glad to say that it is giving us every satisfaction. It is fixed about 400 feet below the surface, the steam being taken down to it at pressure of 45 lbs. per square inch. We can work the pump without any difficulty at 28 strokes per minute=224 ft. piston speed. The pumping power is enormous. The vacuum in the condenser being from 11½ to 13 lbs. The pump is easily started, and works well and regularly. The amount of steam taken being much less than we anticipated. We consider the economy in working very satisfactory indeed. The desire for power and economy at the present day will certainly bring this pump into great requisition.

(Signed M. STRAW, Manager.

SIZES AND PARTICULARS.

Diameter of High-pressure Cylinder	3900 360 480	616 33 30 38	7	8 14 6 24 8800 160 213 267	10 18 5 24 6100 360 480 600	10 18 6 24 8800 250 333 417	10 18 7 24 12,000 184 245 306	10 18 8 24 15,650 140 187 335	12 21 6 24 8,800 1 360 480 600	12 21 7 24 12,000 264 352 440	12 21 8 24 15,650 202 269 337	12 21 10 24 24,450 130 173 216	14 24 7 36 12,000 360 480 600	14 24 8 36 15,650 275 367 459	14 24 10 36 24,450 175 234 203	14 24 12 36 35,225 122 162 203
CONTINUED.																
Diameter of High-pressure Cylinder 1n. Ditto of Low-pressure Cylinder In. Ditto of Water Cylinder In. Length of stroke 1n. Gallons per hour approximate 1n. Height in feet water can be raised with	28 8 30 15,650	16 28 10 36 24,450	16 28 12 36 35,225	16 28 14 36 47,950	18 32 8 48 13,650	18 32 10 48 24,450	32 12 48	32 14 48	21 36 10 48 24,450	21 36 12 48 35,220	21 36 14 48 47,95	24 43 10 48 0 24,450	24 42 12 48 35,228	24 42 14 48 5 47,950	30 52 12 48 35,225	30 52 14 48 47,950
40 lbs, pressure per square inch in Son-cordensing or cylinder bitto ditto ditto—with Holman's Condenser bitto ditto—with Air-pump Condenser	480	230 307 384	160 213 267	118 154 191	456 603 750	292 389 486	202 269 337	149 198 248	397 528 660	276 363 450	202 269 337		360 480 600	264 352 440	562 750 937	550 685

PRICES GIVEN ON RECEIPT OF REQUIREMENTS.

Any number of these Engines can be placed side by side, to work in conjunction or separately as desired, thereby multiplying the work one Pump to any extent.

THE GRAND PRIZE, THE TRIPLE AWARD.

Gold Medal, Silver Medal, and Honourable Mention awarded at the Paris Exhibition, in competition with all the World, FOR MY LATEST PATENTED STONE BREAKERS AND ORE CRUSHERS.

HIGHEST AWARDS FROM THE
MINING INSTITUTE
OF CORNWALL.

BON

PULVERISERS, M I L L 8 MORTAR MILLS

Improved Patent Stone Breakers & Ore Crushers.

New Patent Reversible Jaws, in Sections with Patent Faced Backs.

NEW PATENT ADJUSTABLE TOGGLES.

OVER 2750 IN USE.

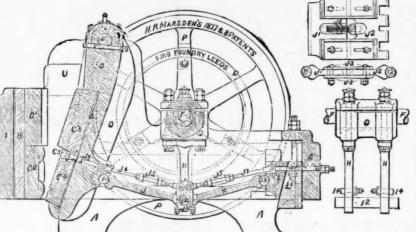
NEW PATENT WROUGHT-IRON CONNECTING

New Patent Draw-back Motion.

NEW PATENT STEEL TOGGLE BEARINGS.

6 O PRIZE MEDALS.

FLY-WHEELS ON BOTH SIDES.



8, Queen-street-place, London, Ed.
DEAR SIR,—We have adopted your Stone Breaker,
many of the mines under our management, and as
pleased to be able to state that they have in all as
given the greatest satisfaction.
We are, yours faithfully,
JOHN TAYLOR AND SOM
H. P. Marsden, Esq.,

H. R. Marsden, Esq., Soho Foundry, Meadow-lane, Leeds.

St. John del Rey Mining Company (Limite).

A SAVING OF FIFTY-FIVE HANDS BY THE USE ONE MEDIUM-SIZED MACHINE.

ONE MEDIUM-SIZED MACHINE.

BLAKE'S STONE BREAKER.—Statement made by the maging Director of the St. John del Rey Mining Mr. John Hockin, with regard to six months pages working of Blake's Stone Breaker, affording facility in judging of the relative economy of machine and mallabour in this kind of work, and also of the cost of gent has been breaker to work in difficult places. The property of the machine referred to by the company and adding to this the cost of earns carriage, and fixing, the aggregate cost to the company is enabled to dispense with the labour of the Breaker in working order was £500. By this control of the thing of the working order was £500. By this control of the thing of the state of the thing order was £500. By this control of working the machine could not be more than the way of about five men (the machine requires but one mained to the machine requires but one mained to the machine requires the control of the machine requires and the machine state of the machine requires and the machine necessary, the saving must be enormous.—Mining Journal.

ALL BEARINGS are renewable, and made of H.R.M.'s Patent Compound ANTIFRICTION METAL CATALOGUES, TESTIMONIALS, &c.

H. R. MARSDEN, SOHO FOUNDRY, LEEDS.

Patentee of the New Patent Special Fine Crusher, for reducing Gold Quartz, Lead Ore, and all kinds of Materials to an impalpable powder. Awarded the FIRST SILVER MEDAL by the Cornwall Mining Institute. Particulars of results, &c., on application.

SPECIALITIES ARE HIS

STEAM PUMPS

COLLIERY PURPOSES,

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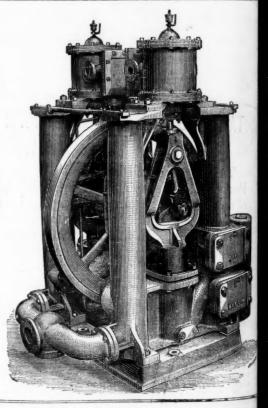
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